REPUBLIC OF KENYA



COUNTY GOVERNMENT OF KIRINYAGA P.O. BOX 260 - 10304, KUTUS.

DEPARTMENT OF TRANSPORT, ROADS AND PUBLIC WORKS

OPEN TENDER

FOR

TENDER FOR PROPOSED INSTALLATION OF 20M HIGH MAST FLOOD LIGHT FOR VARIOUS WARD, KIRINYAGA COUNTY

TENDER NEGOTIATION NO: 837129-2020/2021

COUNTY SPECIFIC PROCUREMENT

(Reserved for AGPO)

DECEMBER 2020

County Government of Kirinyaga P.O. Box 260-10304 KUTUS

Website: www.Kirinyaga.go.ke

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SECTION I - INVITATION FOR TENDER

TENDER NAME: TENDER FOR PROPOSED INSTALLATION OF 20M HIGH MAST FLOOD LIGHTS FOR VARIOUS WARD, KIRINYAGA COUNTY.

TENDER NEGOTIATION NO: 837129-2020/2021

The County Government of Kirinyaga invites sealed bids from all, interested, eligible and qualified AGPO companies for the above-mentioned works.

Interested and eligible **County Specific Procurement reserved for residence of Kirinyaga County** candidates may obtain detailed information and inspect the tender documents at Kirinyaga County Headquarters, Kutus, Supply Chain Management Office, Room B15 during normal working hours. Interested and eligible tenderers may obtain further information from and inspect the tender documents at Director Supply Chain Management Office, 1st Floor, Kirinyaga County Headquarters, Kutus during normal working hours.

A complete set of tender documents may be obtained by interested bidders from the Public Procurement Information Portal website http://tenders.go.ke or the County website www.kirinyaga.go.ke. Bidders who download the documents from the website MUST forward their particulars (Name, contacts, physical address and the tender no./ description) immediately to procurement@kirinyaga.go.ke for recording and any further clarifications or addendums.

Tenders must be accompanied by dully filled, signed and stamped Tender Securing Declaration Form for **AGPO** registered groups in the format provided.

Prices quoted should be inclusive of all taxes and delivery costs and must be expressed in Kenya shillings and shall remain valid for a period of **120 days** from the closing date of the tender.

Tenderers shall ensure that the submitted bid (documents) is (are) serialized/paginated, intact and in PDF format. (i.e., each page in the submitted bid shall have serial identification and uploaded in PDF format).

Tenderers shall electronically upload copies of all the relevant certificates and documents on e-procurement system in support of their bids on or before *Tuesday 5th January 2021 AT* 11.00 A.M

Preliminary and Technical bid documents shall automatically close immediately after the indicated date & time above mentioned. Thereafter the bids will be electronically opened in the presence of tenderers who choose to attend at the 3rd floor Conference Room, Kirinyaga County Headquarters, Kutus or as may be indicated in the Tender Document

The tenderers' representatives who choose to attend shall sign a register evidencing their attendance.

HEAD, SUPPLY CHAIN MANAGEMENT FOR: COUNTY SECRETARY

SECTION II - INSTRUCTIONS TO TENDERERS

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SECTION II - INSTRUCTION TO TENDERERS

GENERAL

2.1 Scope of Bid

- 2.1.1. The Employer, as defined in the Conditions of Contract Part II hereinafter "the Employer" wishes to receive bids for the construction of works as described in Section 1, clause 102 of the Special Specifications –"Location and extent of the Works"
- 2.1.2. The successful bidder will be expected to complete the Works within the period stated in the Appendix to Bid from the date of commencement of the Works.
- 2.1.3. Throughout these bidding documents, the terms bid and BID and their derivatives (bidder/Bidder, bid/bidded, bidding/Bidding etc) are synonymous, and day means calendar day. Singular also means plural.

2.2 Source of Funds

2.2.1. The source of funding is the County Government of Kirinyaga.

2.3 Corrupt Practices

- 2.3.1. The Government requires that the bidders, suppliers, sub-contractors and supervisors observe the highest standard of ethics during the procurement and execution of such contracts. In this pursuit of this policy, the government;
 - a) Defines for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in the execution, and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Employer of the benefits of free and open competition
 - b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract, and
 - c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a government contract if it at any times determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government financed contract.

2.4 Eligibility

This invitation to tender is open to all tenderers who are qualified as stated in the appendix.

2.5 Qualification Requirements

To be qualified for award of Contract, the tenderer shall provide evidence satisfactory to the Employer of their eligibility under Sub clause 2.1. above and of their capability and adequacy of resources to effectively carry out the subject Contract. To this end, the tenderer shall be required to update the following information already submitted during prequalification: -

- (a) Details of experience and past performance of the tenderer on the works of a similar nature and details of current work on hand and other contractual commitments.
- (b) The qualifications and experience of key personnel proposed for administration and execution of the contract, both on and off site.
- (c) Major items of construction plant and equipment proposed for use in carrying out the Contract. Only reliable plaint in good working order and suitable for the work required of it shall be shown on this schedule. The tenderer will also indicate on this schedule when each item will be available on the Works. Included also should be a schedule of plaint, equipment and material to be imported for the purpose of the Contract, giving details of make, type, origin and CIF value as appropriate.
- (d) Details of sub-contractors to whom it is proposed to sublet any portion of the Contract and for whom authority will be requested for such subletting in accordance with clause 4 of the Condition of Contract.
- (e) A draft Program of Works in the form of a bar chart and Schedule of Payment which shall form part of the Contract if the tender is accepted. Any change in the Program or Schedule shall be subjected to the approval of the Engineer.
- (f) Details of any current litigation or arbitration proceedings in which the tenderer is involved as one of the parties.

2.6 Joint Ventures

Tenders submitted by a joint venture of two or more firms as partners shall comply with the following requirements: -

- (a) The tender, and in case of a successful tender, the Form of Agreement, shall be signed so as to be legally binding on all partners
- (b) One of the partners shall be nominated as being in charge, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners

- (c) The partner in charge shall be authorized to incur liabilities and receive instructions for an on behalf of any and all partners of the joint venture and the entire execution of the Contract including payment shall be done exclusively with the partner in charge.
- (d) All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Form of Tender and the Form of Agreement (in case of a successful tender)
- (e) A copy of the agreement entered into by the joint venture partners shall be submitted with the tender.

2.7 Cost of Tendering

- 2.7.1 The Tenderer shall bear all costs associated with the preparation and submission of his tender and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.
- 2.7.2 The price to be charged for the tender document shall not exceed Kshs.1,000/=
- 2.7.3 The procuring entity shall allow the tenderer to view the tender document free of charge before purchase.

2.8 Site Visit

- 2.8.1 Due to the **COVID** -19 pandemic and consequently the Public Health directives issued, there shall be NO Pre -Tender Site Visits. However, bidders are encouraged to make separate arrangements to acquaint themselves with the site before submissions of their bids and can submit in writing any queries to the undersigned vide electronic means.
- 2.8.2 The bidders shall be responsible for the accuracy of their bids and bid proposals.
- 2.8.3 The bidder is requested as far as possible to submit any questions in writing or by cable, to reach the Employer not later than two weeks before the submission deadline. Any modification of the Bidding Documents which may become necessary as a result of questions raised or clarifications issued shall be made by the Employer exclusively through the issue of an Addendum published on the County website.

2.9 Tender Documents

- 2.9.1 The Tender documents comprise the documents listed here below and should be read together with any Addenda issued in accordance with Clause 7 of these instructions to tenderers.
 - (a) Invitation to Bid
 - (b) Instructions to Bidders and Conditions of Tender
 - (c) Appendix to Instruction to Tenderers
 - (d) Conditions of Contract Part I
 - (e) Conditions of Contract Part II
 - (f) Road Maintenance Manual (May 2010 Edition)
 - (g) Standard Specifications
 - (h)Special Specifications
 - (i) Form of Bid, Appendix to Form of Bid and Bid Security
 - (i) Bills of Quantities
 - (k) Schedules of Supplementary information
 - (1) Form of Contract Agreement
 - (m) Form of Performance Security
 - (n) Drawings
 - (o) BID Addenda (BID Notices)
 - (p) Declaration Form
- 2.9.2 The tenderer is expected to examine carefully all instructions, conditions, forms, terms, specifications and drawings in the tender documents. Failure to comply with the requirements for tender submission will be at the tenderer's risk and may result in rejection of his tender. Pursuant to clause 2.25 of Instructions to Tenderers, tenders which are not substantially responsive to the requirements of the tender documents may also be rejected.
- 2.9.3 All recipients of the documents for the proposed Contract for the purpose of submitting a tender (whether they submit a tender or not) shall treat the details of the documents as "private and confidential".

2.10 Inquiries by tenderers

- 2.10.1 A tenderer making an inquiry relating to the tender document may notify the Employer in writing or by telex, cable or facsimile at the Employer's mailing address indicated in the Invitation to Tender. The Employer will respond in writing to any request for clarification which he receives earlier than 7 days prior to the deadline for the submission of tenders. Written copies of the Employer's response (including the query but without identifying the source of the inquiry) will be sent to all prospective tenderers who have purchased the tender documents.
- 2.10.2 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

2.11 Amendment of Tender Documents

- 2.9.1 At any time prior to the deadline for submission of tenders the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective tenderer, modify the tender documents by issuing Addenda.
- 2.9.2 Any Addendum will be notified in writing or by cable, telex or facsimile to all prospective tenderers who have purchased the tender documents and will be binding upon them.
- 2.9.3In order to allow prospective tenderers reasonable time in which to take the Addendum into account in preparing their tenders, the Employer may, at his discretion, extend the deadline for the submission of tenders.

2.12 Language of Tender

2.12.1 The tender and all correspondence and documents relating to the tender exchanged between the tenderer and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the tenderer with the tender may be in another language provided they are accompanied by an appropriate translation of pertinent passages in the above stated language. For the purpose of interpretation of the tender, the English language shall prevail.

2.13 Documents Comprising the Tender

- 2.13.1 The tender to be prepared by the tenderer shall comprise:
 - a) Duly filled-in the Form of Bid and Appendix to form of bid;
 - b) Bid security;
 - c) Priced Bills of Quantities;
 - d) Schedules of information
 - e) Qualification Criteria
 - f) Any other materials required to be completed and submitted in accordance with the Instructions to Bidders embodied in these bidding documents.
- 2.13.2 The Forms, Bills of Quantities and Schedules provided in the tender documents shall be used without exception (subject to extensions of the schedules in the same format and to the provisions of clause 13.2 regarding the alternative forms of Tender Surety).

2.14 Tender Prices

2.14.1 All the insertions made by the tenderer shall be made in INK and the tenderer shall clearly form the figures. The relevant space in the Form of

Tender and Bills of Quantities shall be completed accordingly without interlineations or erasures except those necessary to correct errors made by the tenderer in which case the erasures and interlineations shall be initialed by the person or persons signing the tender.

- 2.14.2 A price or rate shall be inserted by the tenderer for every item in the Bills of Quantities whether the quantities are stated or not. Items against which no rate or price is entered by the tenderer will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities.
- 2.14.3 The prices and unit rates in the Bills of Quantities are to be the full [all-inclusive] value of the Work described under the items, including all costs and expenses which may be necessary and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause 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.
- 2.14.4 Each price or unit rate inserted in the Bills of Quantities should be a realistic estimate for completing the activity or activities described under that particular item and the tenderer is advised against inserting a price or rate against any item contrary to this instruction.
- 2.14.5 Every rate entered in the Bills of Quantities, whether or not such rate be associated with a quantity, shall form part of the Contract. The Employer shall have the right to call for any item of work contained in the Bills of Quantities, and such items of work to be paid for at the rate entered by the tenderer and it is the intention of the Employer to take full advantage of unbalanced low rates.
- 2.14.6 Unless otherwise specified the tenderer must enter the amounts representing 10% of the sub-total of the summary of the Bills of Quantities for Contingencies and Variation of Prices [V.O.P.] payments in the summary sheet and add them to the sub-total to arrive at the tender amount.
- 2.14.7 The tenderer shall furnish with his tender written confirmation from his suppliers or manufacturers of basic unit rates for the supply of items listed in the Conditions of Contract clause 70 where appropriate. The Employer may require the tenderer to justify such rates so obtained from the suppliers or manufacturers.
- 2.14.8 The rates and prices quoted by the tenderer are subject to adjustment during the performance of the Contract only in accordance with the Provisions of the Conditions of Contract. The tenderer shall complete

- the schedule of basic rates and shall submit with his tender such other supporting information as required under clause 70 of the Conditions of Contract Part II.
- 2.14.9 Contract price variations shall not be allowed within the first 12 months of the contract.
- 2.14.10Where quantity contract variation is allowed, the variation shall not exceed 25% of the original contract quantity.
- 2.14.11Price variation requests shall be processed by the procuring entity within 30 days of receiving the request.

2.15 Currencies of Tender and Payment

2.15.1 Tenders shall be priced in Kenya Shillings and the tender sum shall be in Kenya Shillings.

2.16 Tender Validity

- 2.16.1 The tender shall remain valid and open for acceptance for a period of One twenty days (120) days from the specified date of tender opening or from the extended date of tender opening (in accordance with clause 7.4 here above) whichever is the later.
- 2.16.2 In exceptional circumstances prior to expiry of the original tender validity period, the Employer may request the tenderer for a specified extension of the period of validity. The request and the responses thereto shall be made in writing or by cable, telex or facsimile. A tenderer may refuse the request without forfeiting his Tender Surety. A tenderer agreeing to the request will not be required nor permitted to modify his tender, but will be required to extend the validity of his Tender Surety correspondingly.

2.17 Tender Security

- 2.17.1 The tenderer shall furnish as part of his tender, a Tender Security in the amount and form stated in the Appendix to Instructions to Tenderers.
- 2.17.2 The tender security shall not exceed 2 percent of the tender price.
- 2.17.3 The Tender Security shall be valid at least thirty (30) days beyond the tender validity period
- 2.17.4 Any tender not accompanied by an acceptable Tender Surety will be rejected by the Employer as non-responsive.

- 2.17.5 The Tender Sureties of unsuccessful tenderers will be returned as promptly as possible but not later than twenty-eight (28) days after expiration of the tender validity period. The Tender Surety of the successful tenderer will be returned upon the tenderer executing the Contract and furnishing the required Performance Security.
- 2.17.6 The Tender Surety may be forfeited:
 - a) if a tenderer withdraws his tender during the period of tender validity: or
 - b) in the case of a successful tenderer, if he fails, within the specified time limit
 - i. to sign the Agreement, or
 - ii. to furnish the necessary Performance Security
 - c) if a tenderer does not accept the correction of his tender price pursuant to clause 23.

2.18 No Alternative Offers

- 2.18.1 The tenderer shall submit an offer which complies fully with the requirements of the tender documents unless otherwise provided for in the appendix.
- Only one tender may be submitted by each tenderer either by himself or as partner in a joint venture. A tenderer who submits or participates in more than one tender will be disqualified.
- 2.18.2 The tenderer shall not attach any conditions of his own to his tender. The tender price must be based on the tender documents. The tenderer is not required to present alternative construction options and he shall use without exception, the Bills of Quantities as provided, with the amendments as notified in tender notices, if any, for the calculation of his tender price. Any tenderer who fails to comply with this clause will be disqualified.

2.19 Format and Signing of Tenders

2.19.1 The complete tender shall be without alterations, interlineations or erasures, except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person of persons signing the tender.

2.20 Deadline for Submission of Tenders

2.20.1 The Tenders to be submitted to County Government of Kirinyaga through **IFMIS SUPPLIER PORTAL**: <u>supplier.treasury.go.ke</u> not later

- than **Tuesday 5th January 2021 AT 11.00 A.M** the system shall not permit submission after the said date and time or unless otherwise specified under Appendix to Instructions to Tenderers.
- (a) be addressed to the Employer at the address provided in the invitation to tender;
- (b) bear the name and identification number of the Contract as defined in the invitation to tender; and
- (c) provide a warning not to open before the specified time and date for tender opening.
- 2.20.2 Tenders shall be delivered to the Employer at the address specified above not later than the time and date specified in the invitation to tender. However, the Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with Sub-Clause 2.5 in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline will then be subject to the new deadline.
- 2.20.3 Any tender received after the deadline prescribed in clause 2.17 will be returned to the tenderer un-opened.
- 2.20.4 Tenderers may modify or withdraw their tenders by giving notice in writing before the deadline prescribed in clause 2.17. Each tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with clause 2.18, with the outer and inner envelopes additionally marked "MODIFICATION" and "WITHDRAWAL", as appropriate. No tender may be modified after the deadline for submission of tenders.
- 2.20.5 Withdrawal of a tender between the deadline for submission of tenders and the expiration of the period of tender validity specified in the invitation to tender or as extended pursuant to Clause 2.17 may result in the forfeiture of the Tender Security pursuant to Clause 2.14.
- 2.20.6 Tenderers may only offer discounts to, or otherwise modify the prices of their tenders by submitting tender modifications in accordance with Clause 2.18 or be included in the original tender submission.

2.21 Modification and Withdrawal of Tenders

- 2.21.1 The tenderer may modify or withdraw his tender after tender submission, provided that written notice of the modification or withdrawal is received by the Employer prior to prescribed deadline for submission of tenders.
- 2.21.2 The tenderer's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions for the submission of tenders, with the inner and outer envelopes additionally marked "MODIFICATION" or "WITHDRAWAL" as appropriate.
- 2.21.3 No tender may be modified subsequent to the deadline for submission of tenders.
- 2.21.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the period of tender validity specified on the tender form. Withdrawal of a tender during this interval will result in the forfeiture of the Tender Surety.
- 2.21.5 Subsequent to the expiration of the period of tender validity prescribed by the Employer, and the tenderer having not been notified by the Employer of the award of the Contract or the tenderer does not intend to conform with the request of the Employer to extend the period of tender validity, the tenderer may withdraw his tender without risk of forfeiture of the Tender Surety.

2.22 Tender Opening

- 2.22.1 The Employer will open the tenders in the presence of the tenderers' representatives who choose to attend at the time and location indicated in the Letter of Invitation to Tender. The tenderers' representatives who are present shall sign a register evidencing their attendance.
- 2.22.2 Tenders for which an acceptable notice of withdrawal has been submitted, pursuant to clause 19, will not be opened. The Employer will examine the tenders to determine whether they are complete, whether the requisite Tender Sureties have been furnished, whether the documents have been properly signed and whether the tenders are generally in order.
- 2.22.3 At the tender opening, the Employer will announce the tenderer's names, total tender price, tender price modifications and tender withdrawals, if any, the presence of the requisite Tender Surety and such other details as the Employer, at his discretion, may consider appropriate. No tender shall be rejected at the tender opening except for late tenders.
- 2.22.4 The Employer shall prepare minutes of the tender opening including the information disclosed to those present.

2.22.5 Tenders not opened and read out at the tender opening shall not be considered further for evaluation, irrespective of the circumstances.

2.23 Process to be Confidential

- 2.23.1 After the public opening of tenders, information relating to the examination, clarification, evaluation and comparisons of tenders and recommendations concerning the award of Contract shall not be disclosed to tenderers or other persons not officially concerned with such process until the award of Contract is announced.
- 2.23.2 Any effort by a tenderer to influence the Employer in the process of examination, evaluation and comparison of tenders and decisions concerning award of Contract may result in the rejection of the tenderer's tender.

2.24 Clarification of Tenders

- 2.24.1 To assist in the examination, evaluation and comparison of tenders, the Employer may ask tenderers individually for clarification of their tenders, including breakdown of unit prices. The request for clarification and the response shall be in writing or by cable, facsimile or telex, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the employer during the evaluation of the tenders in accordance with clause 24
- 2.24.2 No tenderer shall contact the Employer on any matter relating to his tender from the time of the tender opening to the time the Contract is awarded. If the tenderer wishes to bring additional information to the notice of the Employer, he shall do so in writing.

2.25 Determination of Responsiveness

- 2.25.1 Prior to the detailed evaluation of tenders, the Employer will determine whether each tender is substantially responsive to the requirements of the tender documents.
- 2.25.2 For the purpose of this clause, a substantially responsive tender is one which conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, completion timing or administration of the Works to be undertaken by the tenderer under the Contract, or which limits in any substantial way, inconsistent with the tender documents, the Employer's rights or the tenderers obligations under the Contract and the rectification of which

would affect unfairly the competitive position of other tenderers who have presented substantially responsive tenders.

- 2.25.3 Each price or unit rate inserted in the Bills of Quantities shall be a realistic estimate of the cost of completing the works described under the particular item including allowance for overheads, profits and the like. Should a tender be seriously unbalanced in relation to the Employer's estimate of the works to be performed under any item or groups of items, the tender shall be deemed not responsive.
- 2.25.4 A tender determined to be not substantially responsive will be rejected by the Employer and may not subsequently be made responsive by the tenderer by correction of the non-conforming deviation or reservation.

2.26 Correction of Errors

- 2.26.1 Tenders determined to be substantially responsive shall be checked by the Employer for any arithmetic errors in the computations and summations. Errors will be corrected by the Employer as follows:
 - (a) Where there is a discrepancy between the amount in figures and the amount in words, the amount in words will govern.
 - (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will prevail, unless in the opinion of the Employer, there is an obvious typographical error, in which case adjustment will be made to the entry containing that error.
 - (c) In the event of a discrepancy between the tender amount as stated in the Form of Tender and the corrected tender figure in the main summary of the Bills of Quantities, the amount as stated in the Form of Tender shall prevail.
 - (d) The Error Correction Factor shall be computed by expressing the difference between the tender amount and the corrected tender sum as a percentage of the corrected builder's work (i.e. corrected tender sum less Prime Cost and Provisional Sums.
 - (e) The Error Correction Factor shall be applied to all builder's work (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuations of variations.
 - (f) The amount stated in the tender will be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the tenderer, shall be considered as binding upon the

tenderer. If the tenderer does not accept the corrected amount, the tender may be rejected and the Tender Security may be forfeited in accordance with clause 13.

2.27 Conversion to Single Currency

- 2.27.1 For compensation of tenders, the tender price shall first be broken down into the respective amounts payable in various currencies by using the selling rate or rates of the Central Bank of Kenya ruling on the date twenty-one (21) days before the final date for the submission of tenders.
- 2.27.2 The Employer will convert the amounts in various currencies in which the tender is payable (excluding provisional sums but including Day works where priced competitively) to Kenya Shillings at the selling rates stated in clause 25.1.

2.28 Evaluation and Comparison of Tenders

- 2.28.1 The Employer will evaluate only tenders determined to be substantially responsive to the requirements of the tender documents in accordance with clause 23.
- 2.28.2 In evaluating tenders, the Employer will determine for each tender the evaluated tender price by adjusting the tender price as follows:
 - (a) Making any correction for errors pursuant to clause 24.
 - (b) Excluding Provisional Sums and provision, if any, for Contingencies in the Bills of Quantities, but including Day works where priced competitively.
- 2.28.3 The Employer reserves the right to accept any variation, deviation or alternative offer. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the tender documents or otherwise result in the accrual of unsolicited benefits to the Employer, shall not be taken into account in tender evaluation.
- 2.28.4 Price adjustment provisions in the Conditions of Contract applied over the period of execution of the Contract shall not be taken into account in tender evaluation.
- 2.28.5 If the lowest evaluated tender is seriously unbalanced or front loaded in relation to the Employer's estimate of the items of work to be performed under the Contract, the Employer may require the tenderer to produce detailed price analyses for any or all items of the Bills of Quantities, to demonstrate the relationship between those prices, proposed construction methods and schedules. After evaluation of the price analyses, the Employer may require

that the amount of the Performance Security set forth in clause 29 be increased at the expense of the successful tenderer to a level sufficient to protect the Employer against financial loss in the event of subsequent default of the successful tenderer under the Contract.

- 2.28.6 Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not sub-contract work valued at more than 50% of the Contract Price excluding provisional sums to a non-indigenous sub-contractor.
- 2.28.7 Preference where allowed in the evaluation of tenders shall not exceed 15%
- 2.28.8 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.
- 2.28.9 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.
- 2.28.10 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.
- 2.28.11 Poor past performance shall not be used as an evaluation criterion unless specifically provided for in the appendix.

2.29 Award Criteria

- 2.29.1 Subject to Sub-clause 27.2, the Employer will award the Contract to the tenderer whose tender is determined to be substantially responsive to the tender documents and who has offered the lowest evaluated tender price subject to possessing the capability and resources to effectively carry out the Contract Works as required in Sub-clause 2.1 and 2.2 here above.
- 2.29.2 The Employer reserves the right to accept or reject any tender, and to annual the tendering process and reject all tenders, at any time prior to award of Contract, without thereby incurring any liability to the affected tenderers or any obligation to inform the affected tenderers of the grounds for the Employer's action.

2.30 Notification of Award

2.30.1 Prior to the expiration of the period of tender validity prescribed by the Employer, the Employer will notify the successful tenderer by cable, telefax or telex and confirmed in writing by registered letter that his tender has been accepted. This letter (hereinafter and in all Contract documents called "Letter

of Acceptance") shall name the sum (hereinafter and in all Contract documents called "the Contract Price") which the Employer will pay to the Contractor in consideration of the execution and completion of the Works as prescribed by the Contract.

- 2.30.2 At the same time that the Employer notifies the successful tenderer that his tender has been accepted, the Employer shall notify the other tenderers that the tenders have been unsuccessful.
- 2.30.3 Within fourteen [14] days of receipt of the Form of Contract Agreement from the Employer, the successful tenderer shall sign the form and return it to the Employer together with the required Performance Security.
- 2.30.4 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.

2.31 Signing of Agreement

- 2.31.1 At the same time that the Employer notifies the successful bidder that its bid has been accepted, the Employer will send the bidder the Agreement in the form provided in the bidding documents, incorporating all agreements between the parties.
- 2.31.2 After 21 days of receipt of the Agreement, the successful bidder shall sign the Form of Agreement and return it to the Employer, together with the required performance security.

2.32 Performance Guarantee

- 2.32.1 Within twenty-eight [28] days of receipt of the notification of award from the Employer, the successful tenderer shall furnish the Employer with a Performance Security in the amount stated in the Appendix to Instructions to Tenderers and in the format stipulated in the Conditions of Contract.
- 2.32.2 The Performance Security to be provided by the successful tenderer shall be an unconditional Bank Guarantee issued at the tenderer's option by a reputable Bank approved by the Employer and located in the Republic of Kenya and shall be divided into two elements namely, a performance security payable in foreign currencies (based upon the exchange rates determined in accordance with clause 60(5) of the Conditions of Contract) and a performance security payable in Kenya Shillings. The value of the two securities shall be in the same proportions of foreign and local currencies as requested in the form of foreign currency requirements.
- 2.32.3 Failure of the successful tenderer to lodge the required Performance Security shall constitute a breach of Contract and sufficient grounds for the annulment of the award and forfeiture of the Tender Security and any other remedy under

the Contract. The Employer may award the Contract to the next ranked tenderer.

2.33 Advance Payment

2.33.1 An advance payment, if approved by the Employer, shall be made under the Contract, if requested by the Contractor, in accordance with clause 60(1) of the Conditions of Contract. The Advance Payment Guarantee shall be denominated in the proportion and currencies named in the form of foreign currency requirements. For each currency, a separate guarantee shall be issued. The guarantee shall be issued by a Bank located in the Republic of Kenya, or a foreign Bank through a correspondent Bank located in the Republic of Kenya, in either case subject to the approval of the Employer.

2.34 Contract Effectiveness

2.34.1 The Contract will be effective only upon signature of the Agreement between the Contractor and the Employer.

SECTION III: APPENDIX TO INSTRUCTIONS TO TENDERERS

Notes on the Appendix to Instructions to Tenderers

The following appendix to instructions to tenderers shall complement or amend the provisions of the instructions to tenderers (Section II). Wherever there is a conflict between the provisions of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers.

ITT Clause Number	Amendments of, and Supplements to, Clauses in the Instruction to Tenderers
2.4	Eligible tenderers: Reserved for Interested and eligible AGPO- Reserved for County Specific Procurement
2.5	Particulars of eligibility and qualifications documents of evidence required. Copies of: i) Certificate of Incorporation ii) Certificate of valid tax compliance iii) Proof of being a resident of Kirinyaga
2.12	The Language of all correspondence and documents related to the Tender is: English
2.14	Prices shall be quoted in Kenya Shillings
2.16	The Tender validity period shall be 120 days.
2.17	The Tender Security shall be: A duly completed Tender Securing Declaration Form, duly filled, signed and stamped by the Tenderer in the format provided Section VIII-Standard Forms.
2.20	(1) The tenderers shall upload copies of all the relevant certificates online vide IFMIS SUPPLIER PORTAL: supplier.treasury.go.ke and will close automatically after the closing date and time. (2) The tenderers shall sign all statements, documents and certificates uploaded to take responsibility for their correctness and authenticity.
2.20.1	The Tender opening be as follows: Tender documents shall be electronically opened immediately after the closing date and time, that is <i>Tuesday 5th January 2021 AT 11.00 A.M</i> Tenders will be opened immediately thereafter in the presence of the bidders or their representatives who choose to attend the opening at The County Headquarters, 3rd Floor, Conference Room. The tenderers' representatives who choose to attend shall sign a register evidencing their attendance.

- 2.22 Tenderers are required to submit the following MANDATORY DOCUMENTS which will be used during PRELIMINARY EXAMINATION to determine responsiveness, notwithstanding any other requirement in the tender document:
 - 1. Copy of Certificate of Incorporation/Business Name certified by commissioner of oaths
 - 2. Certificate A copy of valid Tax compliance Certificate certified by commissioner of Oaths (will be checked with KRA TCC.)
 - 3. A Certified Copy of RECENT CR 12 Form (24 Months) from Registrar of company. For AGPO Tenders BIDDERS should be provided a valid certificate of Registration from Treasury for the relevant special group and National ID(s) for the directors
 - 4. Registration with National Construction Authority (NCA) 8 and above as a Road Works contractor valid at the date of tender of submission.
 - 5. Copy of Valid Contractors Annual Practicing License from National Construction Authority (NCA) as a Road Works contractor
 - 6. Financial audited accounts for two (2) previous years endorsed, signed and stamped by a registered external auditor.
 - 7. Duly filled, signed and stamped confidential business questionnaire by an individual entrusted with the powers of attorney
 - 8. Duly filled, signed and stamped Priced Bills of Quantities.
 - 9. Duly filled, signed and stamped Form of Tender
 - 10. Duly filled, signed and stamped self-declaration forms (r 62).
 - 11. Duly filled, signed and stamped Tender Securing Declaration Form.
 - 12. Since this is a County Specific Procurement reserved for Kirinyaga County Residents, any acceptable evidence/proof is required e.g. proof of physical location of the company by attaching evidence (title deed, lease agreement, utility bills) etc.
 - 13. Tenderers shall ensure that the submitted bid (documents) is (are) serialized/paginated, intact and in PDF format. (i.e., in the format of 1,2,3,4,5......) from the first page to the last page and uploaded in PDF format).

EVALUATION PROCESS / EVALUATION CRITERIA

STAGE 1. MANDATORY/PRELIMINARY REQUIREMENTS

The following **must** be submitted together with the Bid

1. All entries must be typed or written in ink. Mistakes must not be erased but should be crossed out and corrections made and initialed by the persons signing the tender.

Bidders shall attach copies of the under listed documents and Must be certified (signed and stamped) by commissioner of oaths/advocate registered in Kenya:

- 1. Copy of Certificate of Incorporation/Business Name Certified by commissioner of oaths
- 2. Certificate A copy of valid Tax Compliance Certificate Certified by commissioner of Oaths (will be checked with KRA TCC.)
- 3. A Certified Copy of RECENT CR 12 Form (Max 24 Months) from Registrar of company. For AGPO Tenders BIDDERS should be provided a valid certificate of Registration from Treasury for the relevant special group and National ID(s) for the Directors
- 4. Valid Copy of Valid NCA Certificate in Electrical Installation Works-category 7 and above
- 5. Valid EPRA (Energy and Petroleum Regulatory Authority) Contractor Registration Class C1 and above
- 6. Financial audited accounts for two (2) previous years endorsed, signed and stamped by a registered external auditor.
- 7. Duly filled, signed and stamped Confidential Business Questionnaire by an individual entrusted with the powers of attorney
- 8. Duly filled, signed and stamped Priced Bills of Quantities.
- 9. Duly filled, signed and stamped Form of Tender
- 10. Duly filled, signed and stamped self-declaration forms (r 62).
- 11. Duly filled, signed and stamped Tender Securing Declaration Form.
- 12. Since this is a County Specific Procurement reserved for Kirinyaga County Residents, any acceptable evidence/proof is required e.g. proof of physical location of the company by attaching evidence (title deed, lease agreement, utility bills) etc.
- 13. Tenderers shall ensure that the submitted bid (documents) is (are) serialized/paginated, intact and in PDF format. (eg., Paginated in the format of 1,2,3,4 from the first page to the last page and uploaded in PDF format).

Bidders that will not comply with the above criteria shall be considered non-responsive

STAGE 2. TECHNICAL EVALUATION

In accordance with clause 2.2.5 of Instruction to Tenderers, the tenderers will be required to provide evidence for eligibility of the award of the tender by satisfying the employer of their eligibility under sub clause 2.5 of Instructions to Tenderers and their capability and adequacy of resources to effectively carry out the subject contract.

In order to comply with provisions of clause 2.5 of Instruction to Tenderers, the tenderers shall be required;

- a) To fill the Standard Forms provided in the bid document for the purposes of providing the required information. The tenderers may also attach the required information if they so desire;
- b) To supply equipment's/items which comply with the technical specifications set out in the bid document. In this regard, the bidders shall be required to submit relevant technical brochures/catalogues with the tender document, highlighting the Catalogue Numbers of the proposed items. Such brochures/catalogues should indicate comprehensive relevant data of the proposed equipment/items which should include but not limited to the following:
 - i. Standards of manufacture;
 - ii. Performance ratings/characteristics;
- iii. Material of manufacture;
- iv. Electrical power ratings; and
- v. Any other necessary requirements (Specify).

The bid will then be analyzed, using the information in the technical brochures, to determine compliance with General and Particular technical specifications for the works as indicated in the tender document. The tenderer shall also fill in the Technical Schedule as specified in the tender document for Equipment and Items indicating the Country of Origin, Model/Make/Manufacturer and catalogue numbers of the Items/Equipment they propose to supply.

The award of points considered in this section shall be as shown below:

PARAMETER POINTS		
1. Compliance with Technical Specifications	30	
2. Legal Capacity Litigation History	- 3	
3. Evidence of Financial Resources	15	
4. Key personnel	14	
5. Construction Experience in the last Five (5) years	20	
6. Schedules of contractors equipment	20	
TOTAL	<u>100</u>	

Legal	2. TECHNICAL	EVALUATION	
Legal 1. History of Non-Performing Contracts 1.50 2. Litigation History 1.50 TOTAL (Legal Capacity) 3.00 (B) FINANCIAL CAPACITY Financial performances (a) the current soundness of the applicants financial position and its prospective long term profitability - last two (2) years audited reports, (b) Evidence of adequacy of working capital: - Last 12 Months certified Bank statements or Liquid assests/Letters of credit facilities/ confirmation of availability of adequate resources/funds to perform the contract (minimum Kshs 1 million). TOTAL (Financial performance) 15.00 TOTAL (Financial performance) 15.00 CONSTRUCTION EXPERIENCE 15.00 CONSTRUCTION EXPERIENCE 15.00 Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least Kshs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Project of similar nature but of lower value than the one in consideration 2 No completed project of similar nature but of lower value than the one in consideration 2 No completed project of similar nature on the consideration 2 No completed project of similar nature but of lower value than the one in consideration 2 No completed project of similar nature but of lower value than the one in consideration 2 No completed project of similar nature 5 No completed 5 No complet	CRITERIA	DESCRIPTION	MAX SCORE %
Capacity 2. Litigation History 1.50	(A) LEGAL CAP	ACITY (must be registered company (partnership, sole etc.)	
TOTAL (Legal Capacity) 3.00		1. History of Non-Performing Contracts	1.50
B) FINANCIAL CAPACITY Financial performances		2. Litigation History	1.50
Submission of Audited Financial reports for the last two [2] years, certified Bank statements and lines of credit, etc to demonstrate:	TOTAL (Legal C	Capacity)	3 00
Submission of Audited Financial reports for the last two [2] years, Certified Bank statements and lines of credit, etc to demonstrate:	(B) FINANCIAL	CAPACITY	0.00
Certified Bank statements and lines of credit, etc to demonstrate:	· · ·		
(a) the current soundness of the applicants financial position and its prospective long term profitability - last two (2) years audited reports, 6.00 (b) Evidence of adequacy of working capital: - Last 12 Months certified Bank statements or Liquid assests/Letters of credit facilities/ confirmation of availability of adequate resources/funds to perform the contract (minimum Kshs 1 million). TOTAL (Financial performance) (C) CONSTRUCTION EXPERIENCE Construction Experience Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) Project of similar nature, complexity or magnitude 3 Project of similar nature but of lower value than the one in consideration 2 No completed project of similar nature — 0 (C) Work methodology Detailed Workplan/ Methodology for implementing of works 5.00 TOTAL (Construction experience) (C) CONSTRUCTION EQUIPMENT CAPACITY Essential Equipment Availability Froof of essential construction equipment ownership or proposal for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; 8.00 A functioning and well-equipped fabrication workshop 4.00	performances		
prospective long term profitability - last two (2) years audited reports, (b) Evidence of adequacy of working capital: - Last 12 Months certified Bank statements or Liquid assests/Letters of credit facilities/ confirmation of availability of adequate resources/funds to perform the contract (minimum Kshs 1 million). 70 TOTAL (Financial performance) 15.00 16 C) CONSTRUCTION EXPERIENCE Construction Experience Specific Construction Experience Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) Project of similar nature, complexity or magnitude	-		
(b) Evidence of adequacy of working capital: - Last 12 Months certified Bank statements or Liquid assests/Letters of credit facilities/ confirmation of availability of adequate resources/funds to perform the contract (minimum Kshs 1 million). TOTAL (Financial performance) (C) CONSTRUCTION EXPERIENCE Construction Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) Project of similar nature, complexity or magnitude		• •	6.00
Bank statements or Liquid assests/Letters of credit facilities/ confirmation of availability of adequate resources/funds to perform the contract (minimum Kshs 1 million). TOTAL (Financial performance) [C] CONSTRUCTION EXPERIENCE Construction Experience Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Project of similar nature, complexity or magnitude			
confirmation of availability of adequate resources/funds to perform the contract (minimum Kshs 1 million). TOTAL (Financial performance) (C) CONSTRUCTION EXPERIENCE Construction			
the contract (minimum Kshs 1 million). 707AL (Financial performance) (C) CONSTRUCTION EXPERIENCE Specific Construction Experience Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) Project of similar nature, complexity or magnitude			
TOTAL (Financial performance) 15.00			9.00
(C) CONSTRUCTION EXPERIENCE Construction experience Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) Project of similar nature, complexity or magnitude		, ,	
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Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) Project of similar nature, complexity or magnitude	(C) CONSTRUC	TION EXPERIENCE	
Participation as contractor, management contractor or subcontractor, in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) • Project of similar nature, complexity or magnitude	Construction	Specific Construction Experience	
Detailed Workplan/ Methodology for implementing of works 5.00	experience	in at Maximum Five (5) public (government) or equivalent contracts within the last Five (5) years, each with a value of at least KShs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods / technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates (Upto 3 Projects, Max of 5 marks each) • Project of similar nature, complexity or magnitude	15.00
TOTAL (Construction experience) (D) CONSTRUCTION EQUIPMENT CAPACITY Essential Proof of essential construction equipment ownership or proposal for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc			
(D) CONSTRUCTION EQUIPMENT CAPACITY Essential Proof of essential construction equipment ownership or proposal for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc	mom 1 = 1 = 1	1 , 50 1 5	
Essential Equipment Availability Proof of essential construction equipment ownership or proposal for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop 4.00 Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc	TOTAL (Constr	uction experience)	20.00
Fequipment Availability for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc 8.00	(D) CONSTRUC	TION EQUIPMENT CAPACITY	
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conditions, etc Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop 4.00 Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc	Equipment	for timely acquisition. Attach evidence of either (owned, leased,	
Concreting Equipment; Electrical Testing Equipment eg. Concrete mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc 8.00	Availability		
mixer, Meggartester, Voltmeter, etc; A functioning and well-equipped fabrication workshop Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc 8.00 8.00			
A functioning and well-equipped fabrication workshop 4.00 Transport and handling equipment- Hoisting Up Crane, Tipper Pick up, etc 8.00			8.00
Transport and handling equipment- Hoisting Up Crane, Tipper Pick 8.00 up, etc			
		Transport and handling equipment- Hoisting Up Crane, Tipper Pick	8.00
	MOMAT (C		20.00

NNEL	
Qualification and experience of key personnel. Attach certified copies of C.Vs and certificates).	
Director/ Management of the firm.	
 Holder of degree in relevant Engineering field 4 	
 Holder of diploma in relevant Engineering field3 	
• Holder of certificate in relevant Engineering field 2	
 Holder of trade test certificate in relevant Engineering field - 1 	4.00
• No relevant certificate 0	1.00
Project Manager / Electrical Engineer; At least 1No.	
• With over 10 years relevant experience 4	6.00
• With over 5 years relevant experience 2	6.00
• With under 5 years relevant experience 1	
At least 2No artisan (trade test certificate in relevant field)	
• Artisan with over 10 years relevant experience 2	
• Artisan with under 10 years relevant experience 1	2.00
 Non skilled worker with over 10 years relevant experience 0 	
	12.00
	20.00
±	30.00
,	
· · · · · · · · · · · · · · · · · · ·	30.00
	30.00
(100.00
	Qualification and experience of key personnel. Attach certified copies of C.Vs and certificates). Director/ Management of the firm. • Holder of degree in relevant Engineering field

In addition to the mandatory requirements above, a minimum technical score of 70% shall be required to proceed to evaluation of the financial bids.

STAGE 3. FINANCIAL EVALUATION

The winning bidder will be the lowest bidder among those who will have passed the technical evaluation as outlined in (1 & 2) above except where the bidder has not satisfied all other requirements stated in the bid document. The financial evaluation will include:

(1)Arithmetic Errors

The bid shall be checked for arithmetic errors based on the rates and the total sums indicated in the bills of quantities. Confirmation shall be sought in writing from the tenderers whose tender sums will be determined to have a significant arithmetic error to their disadvantage, to confirm whether they stand by their tender sums.

(2)Comparison of rates

The evaluation committee will compare rates from different bidders and note consistency of rates and front loading. The evaluation committee will judge and make an appropriate decision giving evidence.

The following evaluation criteria shall be applied not withstanding any other requirement in the tender documents.

Selection Process

Quality Cost Based Selection

STEP 1: Preliminary evaluation

This will be an elimination stage which will be done as per criteria above

STEP 2: Technical Evaluation

Tenderers will be required to provide technical details on their product that meets the provided technical requirement. Only Tenderers who score 70% and above will be considered to be technically responsive and therefore be considered for further evaluation

Technical Evaluation shall be based as per the evaluation criteria provided above

Only bidders who score 70% and above will be subjected to financial evaluation. Those who score below 70% will be eliminated at this stage from the entire evaluation process and will not be considered further.

STEP 3: Financial Evaluation

Upon completion of the technical evaluation a detailed financial evaluation shall follow.

The evaluation shall be in three stages

- a) Determination of Arithmetic errors
- b) Comparison of Rates; and
- c) Consistency of the Rates.

A) Determination of Arithmetic Errors

The bid shall be checked for arithmetic errors based on the rates and the total sums indicated in the bills of quantities. Confirmation shall be sought in writing from the tenderers whose tender sums will be determined to have a significant arithmetic error to their disadvantage, to confirm whether they stand by their tender sums. Discount if any shall be treated as an error.

B) Comparison of rates

Items that are underpriced or overpriced may indicate potential for non-delivery and front loading respectively. The committee shall promptly write to the tenderer asking for detailed breakdown of costs for any of the quoted items, relationship between those prices, proposed construction/installation methods and schedules.

The evaluation committee shall evaluate the responses and make an appropriate recommendation to the procuring entity giving necessary evidence.

C) Consistency of the Rates

The evaluation committee will compare the consistency of rates for similar items and note all inconsistencies of the rates for similar items.

STAGE 4 - RECOMMENDATION FOR AWARD

The successful bidder shall be the tenderer with the **highest Combined Technical** and Financial scores.

The financial submissions of the required services will be divided by the lowest bidder's financial quote to determine the financial score of each bidder using the formulae below:

FΜ

Sf = 100 X /_F where: Sf is the financial score; Fm is the lowest priced financial proposal and F is the price of the proposal under consideration.

Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T=the weight given to the Technical Proposal as

80%: P =the weight given to the Financial Proposal as 20%)

Combined Technical and Financial scores is: :- $S = St \times T \% + Sf \times P \%$

Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T=the weight given to the Technical Proposal: P = the weight given to the Financial Proposal; T + p = I)

The table below summarizes the overall evaluation process and the proposed weighting of each stage.

AREA RATING	RATING/SCORE
STEP 1: Preliminary evaluation	Elimination
STEP 2: Technical Evaluation	80
STEP 3: Financial Evaluation	20
Combined Technical and Financial Score	100

SECTION IV: CONDITIONS OF CONTRACT

PART I: GENERAL CONDITIONS OF CONTRACT

The Conditions Of Contract Part 1 – General Conditions shall be those forming Part 1 of the Conditions Of Contract for works of Civil engineering construction Fourth Edition 1987, reprinted in 1992 with further amendments, prepared by the Federation Internationale des Ingenieurs Conseils (FIDIC)

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat P.O.Box 86 1000 Lausanne 12 Switzerland

Fax: 41 21 653 5432 Telephone: 41 21 653 5003

PART II: CONDITIONS OF PARTICULAR APPLICATION

The following Conditions of Particular Application shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The Particular Condition is preceded by the corresponding clause number of the General Conditions to which it relates.

SECTION IV: CONDITIONS OF CONTRACT

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1. Definitions

1.1 In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated;

"Bill of Quantities" means the priced and completed Bill of Quantities forming part of the tender.

"Compensation Events" are those defined in Clause 24 hereunder.

"The Completion Date" means the date of completion of the Works as certified by the Project Manager, in accordance with Clause 31.

"The Contract" means the agreement entered into between the Employer and the Contractor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works,

"The Contractor" refers to the person or corporate body whose tender to carry out the Works has been accepted by the Employer.

"The Contractor's Tender" is the completed tendering document submitted by the Contractor to the Employer.

"The Contract Price" is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

"Days" are calendar days; "Months" are calendar months.

"A Defect" is any part of the Works not completed in accordance with the Contract.

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

"The Defects Liability Period" is the period named in the Contract Data and calculated from the Completion Date.

"Drawings" include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

"Day-works" are Work inputs subject to payment on a time basis for labour and the associated materials and plant.

"Employer", or the **"Procuring entity"** as defined in the Public Procurement Regulations (i.e. Central or Local Government administration, Universities, Public Institutions and Corporations, etc) is the party who employs the Contractor to carry out the Works.

- **"Equipment"** is the Contractor's machinery and vehicles brought temporarily to the Site for the execution of the Works.
- **"The Intended Completion Date"** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- "Materials" are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- **"Plant"** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- **"Project Manager"** is the person named in the Appendix to Conditions of Contract (or any other competent person appointed by the Employer 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 and shall be an "Architect" or a "Quantity Surveyor" registered under the Architects and Quantity Surveyors Act Cap 525 or an "Engineer" registered under Engineers Registration Act Cap 530.
- "Site" is the area defined as such in the Appendix to Condition of Contract.
- **"Site Investigation Reports"** are those reports that may be included in the tendering documents which are factual and interpretative about the surface and subsurface conditions at the Site.
- **"Specifications"** means the Specifications of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- **"Start Date"** is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with the Site possession date(s).
- **"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.
- **"Temporary works"** are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.
- **"A Variation"** is an instruction given by the Project Manager which varies the Works.
- **"The Works"** are what the Contract requires the Contractor to construct, install, and turnover to the Employer, as defined in the Appendix to Conditions of Contract.

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning in English Language unless specifically defined. The Project Manager will provide instructions clarifying queries about these Conditions of Contract.
- 2.2 If sectional completion is specified in the Appendix to Conditions of Contract, reference in the Conditions of Contract to the Works, the Completion Date and the Intended Completion Date apply to any section of the Works (other than references to the Intended Completion Date for the whole of the Works).
- 2.3 The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;
 - (1) Agreement,
 - (2) Letter of Acceptance,
 - (3) Contractor's Tender,
 - (4) Appendix to Conditions of Contract,
 - (5) Conditions of Contract,
 - (6) Specifications,
 - (7) Drawings,
 - (8) Bill of Quantities,
 - (9) Any other documents listed in the Appendix to Conditions of Contract as forming part of the Contract.

Immediately after the execution of the Contract, the Project Manager shall furnish both the Employer and the Contractor with two copies each of all the Contract documents. Further, as and when necessary the Project Manager shall furnish the Contractor [always with a copy to the Employer] with three [3] copies of such further drawings or details or descriptive schedules as are reasonably necessary either to explain or amplify the Contract drawings or to enable the Contractor to carry out and complete the Works in accordance with these Conditions.

3. Language and Law

3.1 Language of the Contract and the law governing the Contract shall be English language and the Laws of Kenya respectively unless Otherwise stated.

4. Project Manager's Decisions

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

5. Delegation

5.1 The Project Manager may delegate any of his duties and responsibilities to others after notifying the Contractor.

6. Communications

6.1 Communication between parties 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 Employer 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 etc. as listed in the Appendix to Conditions of Contract and also with the Employer, as per the directions of the Project Manager. The Contractor shall also provide facilities and services for them. The Employer may modify the said List of Other Contractors etc., and shall notify the Contractor of any such modification.

9. Personnel

9.1 The Contractor shall employ the key personnel named in the Qualification Information, to carry out the functions stated in the said Information or other personnel approved by the Project Manager. The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Qualification Information. 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.

10. Works

10.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings. The Works may commence on the Start Date and shall be carried out 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.

11. Safety and Temporary Works

- 11.1 The Contractor shall be responsible for the design of temporary works. However before erecting the same, he shall submit his designs including specifications and drawings to the Project Manager and to any other relevant third parties for their approval. No erection of temporary works shall be done until such approvals are obtained.
- 11.2 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary works and all drawings prepared by the Contractor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before they can be used.
- 11.3 The Contractor shall be responsible for the safety of all activities on the Site.

12. Discoveries

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

13. Work Program

13.1 Within the time stated in the Appendix to Conditions of Contract, 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. 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.

The Contractor shall submit to the Project Manager for approval an updated program at intervals no longer than the period stated in the Appendix to Conditions of Contract. If the Contractor does not submit an updated program within this period, the Project Manager may withhold the amount stated in the said Appendix 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. 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.

14. Possession of Site

14.1 The Employer 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 Appendix to Conditions of Contract, the Employer will be deemed to have delayed the start of the relevant activities, and this will be a Compensation Event.

15. Access to Site

15.1 The Contractor shall allow the Project Manager and any other 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.

16. Instructions

16.1 The Contractor shall carry out all instructions of the Project Manager which are in accordance with the Contract.

17. Extension or Acceleration of Completion Date

17.1 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. 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 in writing 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 caused by

- such failure shall not be considered in assessing the new (extended) Completion Date.
- 17.2 No bonus for early completion of the Works shall be paid to the Contractor by the Employer.

18. Management Meetings

18.1 A Contract management meeting shall be held monthly and attended by the Project Manager and the Contractor. Its business shall be to review the plans for the remaining Work and to deal with matters raised in accordance with the early warning procedure. The Project Manager shall record the minutes of management meetings and provide copies of the same to those attending the meeting and the Employer. 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.

19. Early Warning

- 19.1 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.
- 19.2 The Contractor shall cooperate with the Project Manager in making and considering proposals on 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 instructions of the Project Manager.

20. Defects

20.1 The Project Manager shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection 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. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor, However, if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.

- 20.2 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 Appendix to Conditions of Contract. The Defects Liability Period shall be extended for as long as defects remain to be corrected.
- 20.3 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. If the Contractor has not corrected a defect within the time specified in the Project Manager's notice, the Project Manager will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

21. Bills of Quantities

- 21.1 The Bills of Quantities shall contain items for the construction, installation, testing and commissioning of the Work to be done by the Contractor. The Contractor will be paid for the quantity of the Work done at the rate in the Bills of Quantities for each item.
- 21.2 If the final quantity of the Work done differs from the quantity in the Bills of Quantities for the particular item by more than 25 percent and provided the change exceeds 1 percent of the Initial Contract price, the Project Manager shall adjust the rate to allow for the change.
- 21.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bills of Quantities.

22. Variations

- 22.1 All variations shall be included in updated programs produced by the Contractor.
- 22.2 The Contractor shall provide the Project Manager with a quotation for carrying out the variations when requested to do so. The Project Manager shall assess the quotation, which shall be given within seven days of the request or within any longer period as may be stated by the Project Manager and before the Variation is ordered.
- 22.3 If the work in the variation corresponds with an item description in the Bills of Quantities and if in the opinion of the Project Manager, the quantity of work is not above the limit stated in Clause 21.2 or the timing of its execution does not cause the cost per unit of quantity to change, the rate in the Bills 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 Bills of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.
- 22.4 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.
- 22.5 If the Project Manager decides that the urgency of varying the Work would prevent a quotation being given and considered without delaying the Work, no quotation shall be given and the variation shall be treated as a Compensation Event.
- 22.6 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 22.7 When the Program is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.

23. Payment Certificates, Currency of Payments and Advance Payments

- 23.1 The Contractor shall submit to the Project Manager monthly applications for payment giving sufficient details of the Work done and materials on Site and the amounts which the Contractor considers himself to be entitled to. The Project Manager shall check the monthly application and certify the amount to be paid to the Contractor within 14 days. The value of Work executed and payable shall be determined by the Project Manager.
- 23.2 The value of Work executed shall comprise the value of the quantities of the items in the Bills of Quantities completed, materials delivered on Site, variations and compensation events. Such materials shall become the property of the Employer once the Employer has paid the Contractor for their value. Thereafter, they shall not be removed from Site without the Project Manager's instructions except for use upon the Works.
- 23.3 Payments shall be adjusted for deductions for retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of issue of each certificate. If the Employer makes a late payment, the Contractor shall be paid simple interest on the late payment in the next payment. Interest shall be calculated on the basis of number of days delayed at a rate three percentage points above the Central Bank of Kenya's average rate for base lending prevailing as of the first day the payment becomes overdue.
- 23.4 If an amount certified is increased in a later certificate or as a result of an award by 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.
- 23.5 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 23.6 The Contract Price shall be stated in Kenya Shillings. All payments to the Contractor shall be made in Kenya Shillings and foreign currency in the proportion indicated in the tender, or agreed prior to the execution of the Contract Agreement and indicated therein. The rate of exchange for the calculation of the amount of foreign currency payment shall be the rate of exchange indicated in the Appendix to Conditions of Contract. If the Contractor indicated foreign currencies for payment other than the currencies of the countries of origin of related goods and services, the Employer reserves the right to pay the equivalent at the time of payment in the currencies of the countries of such goods and services. Employer and the Project Manager shall be notified promptly by the Contractor of any changes in the expected foreign currency requirements of the Contractor during the execution of the Works as indicated in the Schedule of Foreign Currency Requirements and the foreign and local currency portions of the balance of the Contract Price shall then be amended by agreement between Employer and the Contractor in order to reflect appropriately such changes.
- 23.7 In the event that an advance payment is granted, the following shall apply:
 - a) On signature of the Contract, the Contractor shall at his request, and without furnishing proof of expenditure, be entitled to an advance of 10% (ten percent) of the original amount of the Contract. The advance shall not be subject to retention money.
 - b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.
 - c) Reimbursement of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the Contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the Contract. It shall have been completed by the time 80% of this amount is reached.

The amount to be repaid by way of successive deductions shall be calculated by means of the formula:

$$R = \underbrace{A(x^1 - x^{11})}_{80 - 20}$$

Where:

R = the amount to be reimbursed

A = the amount of the advance which has been granted

X¹ = the amount of proposed cumulative payments as a percentage of the original amount of the Contract. This figure will exceed 20% but not exceed 80%.

X¹¹ = the amount of the previous cumulative payments as a percentage of the original amount of the Contract. This figure will be below 80%but not less than 20%.

d) with each reimbursement the counterpart of the directly liable guarantee may be reduced accordingly.

24. Compensation Events

- 24.1 The following issues shall constitute Compensation Events:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Appendix to Conditions of Contract.
 - (b) The Employer modifies the List of Other Contractors, etc., in a way that affects the Work of the Contractor under the Contract.
 - (c) The Project Manager orders a delay or does not issue drawings, specifications or instructions required for execution of the Works on time.
 - (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon the Work, which is then found to have no defects.
 - (e) The Project Manager unreasonably does not approve a subcontract to be let.
 - (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to tenderers (including the Site investigation reports), from information available publicly and from a visual inspection of the Site.

- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The effects on the Contractor of any of the Employer's risks.
- (j) The Project Manager unreasonably delays issuing a Certificate of Completion.
- (k) Other compensation events described in the Contract or determined by the Project Manager shall apply.
- 24.2 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.
- 24.3 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 will assume that the Contractor will react competently and promptly to the event.
- 24.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having co-operated with the Project Manager.
- 24.5 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the Appendix to Conditions of Contract.
- 24.6 The Contractor shall give written notice to the Project Manager of his intention to make a claim within thirty days after the event giving rise to the claim has first arisen. The claim shall be submitted within thirty days thereafter.

Provided always that should the event giving rise to the claim of continuing effect, the Contractor shall submit an interim claim within the said thirty days and a final claim within thirty days of the end of the event giving rise to the claim.

- 25.1 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 tenders for the Contract and the date of Completion. The adjustment shall be the change in the amount of tax payable by the Contractor.
- 25.2 The Contract Price shall be deemed to be based on exchange rates current at the date of tender submission in calculating the cost to the Contractor of materials to be specifically imported (by express provisions in the Contract Bills of Quantities or Specifications) for permanent incorporation in the Works. Unless otherwise stated in the Contract, if at any time during the period of the Contract exchange rates shall be varied and this shall affect the cost to the Contractor of such materials, then the Project Manager shall assess the net difference in the cost of such materials. Any amount from time to time so assessed shall be added to or deducted from the Contract Price, as the case may be.
- 25.3 Unless otherwise stated in the Contract, the Contract Price shall be deemed to have been calculated in the manner set out below and in subclauses 25.4 and 25.5 and shall be subject to adjustment in the events specified thereunder;
 - (i) The prices contained in the Contract Bills of Quantities shall be deemed to be based upon the rates of wages and other emoluments and expenses as determined by the Joint Building Council of Kenya (J.B.C.) and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.
 - (ii) Upon J.B.C. determining that any of the said rates of wages or other emoluments and expenses are increased or decreased, then the Contract Price shall be increased or decreased by the amount assessed by the Project Manager based upon the difference, expressed as a percentage, between the rate set out in the schedule of basic rates issued 30 days before the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of labour incorporated within the amount of Work remaining to be executed at the date of publication of such increase or decrease.
 - (iii) No adjustment shall be made in respect of changes in the rates of wages and other emoluments and expenses which occur after the date of Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.

- 25.4 The prices contained in the Contract Bills of Quantities shall be deemed to be based upon the basic prices of materials to be permanently incorporated in the Works as determined by the J.B.C. and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.
- 25.5 Upon the J.B.C. determining that any of the said basic prices are increased or decreased then the Contract Price shall be increased or decreased by the amount to be assessed by the Project Manager based upon the difference between the price set out in the schedule of basic rates issued 30 days before the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of the relevant materials which have not been taken into account in arriving at the amount of any interim certificate under clause 23 of these Conditions issued before the date of publication of such increase or decrease.
- 25.6 No adjustment shall be made in respect of changes in basic prices of materials which occur after the date for Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.
- 25.7 The provisions of sub-clause 25.1 to 25.2 herein shall not apply in respect of any materials included in the schedule of basic rates.

26. Retention

26.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Appendix to Conditions of Contract until Completion of the whole of the Works. On Completion of the whole of the Works, half the total amount retained shall be repaid to the Contractor and the remaining half when the Defects Liability Period has passed and the Project Manager has certified that all defects notified to the Contractor before the end of this period have been corrected.

27. Liquidated Damages

- 27.1 The Contractor shall pay liquidated damages to the Employer at the rate stated in the Appendix to Conditions of Contract for each day that the actual Completion Date is later than the Intended Completion Date. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not alter the Contractor's liabilities.
- 27.2 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 rate specified in Clause 23.30.

28. Securities

28.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a reputable bank acceptable to the Employer, and denominated in Kenya Shillings. The Performance Security shall be valid until a date 30 days beyond the date of issue of the Certificate of Completion.

29. Day-works

- 29.1 If applicable, the Day-works rates in the Contractor's tender shall be used for small additional amounts of Work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 29.2 All work to be paid for as Day-works 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.
- 29.3 The Contractor shall be paid for Day-works subject to obtaining signed Day-works forms.

30. Liability and Insurance

- 30.1 From the Start Date until the Defects Correction Certificate has been issued, the following are the Employer'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 Employer 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 Employer or in Employer's design, or due to war or radioactive contamination directly affecting the place where the Works are being executed.

- 30.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is the Employer's risk except loss or damage due to;
 - (a) a defect which existed on or before the Completion Date.
 - (b) an event occurring before the Completion Date, which was not itself the Employer's risk
 - (c) The activities of the Contractor on the Site after the Completion Date.
- 30.3 From the Start Date until the Defects Correction 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 Employer's risk are Contractor's risks.

The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts stated in the Appendix to Conditions of Contract for the following events;

- (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.
- 30.4 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 required to rectify the loss or damage incurred.
- 30.5 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 30.6 Alterations to the terms of insurance shall not be made without the approval of the Project Manager. Both parties shall comply with any conditions of insurance policies.

31. Completion and taking over

31.1 Upon deciding that the Works are complete, the Contractor shall issue a written request to the Project Manager to issue a Certificate of

Completion of the Works. The Employer shall take over the Site and the Works within seven [7] days of the Project Manager's issuing a Certificate of Completion.

32. Final Account

32.1 The Contractor shall issue the Project Manager with a detailed account of the total amount that the Contractor considers payable to him by the Employer 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 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 30 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. The Employer shall pay the Contractor the amount due in the Final Certificate within 60 days.

33. Termination

- 33.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These 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 authorised 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 Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 30 days (for Interim Certificate) or 60 days (for Final Certificate) of issue.
 - (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.

- 33.2 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 Clause 33.1 above, the Project Manager shall decide whether the breach is fundamental or not.
- 33.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 33.4 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. The Project Manager shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

34. Payment upon Termination

- 34.1 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 and delivered to Site up to the date of the issue of the certificate. Additional liquidated damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable by the Contractor.
- 34.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, 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.
- 34.3 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on the Site, plant, equipment and temporary works.
- 34.5 The Contractor shall, during the execution or after the completion of the Works under this clause remove from the Site as and when required, within such reasonable time as the Project Manager may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to or hired by him, and in default the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.
 - Until after completion of the Works under this clause the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and

the verification within a reasonable time of the accounts therefore the Project Manager shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

35. Release from Performance

35.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer 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.

36. Corrupt gifts and payments of commission

The Contractor shall not;

- (a) Offer or give or agree to give to any person in the service of the Employer any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for the Employer or for showing or forbearing to show favor or disfavor to any person in relation to this or any other contract for the Employer.
- (b) Enter into this or any other contract with the Employer in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the Employer.

Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement Regulations issued under The Exchequer and Audit Act Cap 412 of the Laws of Kenya.

37. Settlement of Disputes

38.1 In case any dispute or difference shall arise between the Employer or the Project Manager on his behalf and the Contractor, either during the progress or after the completion or termination of the Works, such 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 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

On the request of the applying party. The institution written to first by the aggrieved party shall take precedence over all other institutions.

- 38.2 The arbitration may be on the construction of this Contract or on any matter or thing of whatsoever nature arising thereunder or in connection therewith, including any matter or thing left by this Contract to the discretion of the Project Manager, or the withholding by the Project Manager of any certificate to which the Contractor may claim to be entitled to or the measurement and valuation referred to in clause 23.0 of these conditions, or the rights and liabilities of the parties subsequent to the termination of Contract.
- 38.3 Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference 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.
- 38.4 Notwithstanding the issue of a notice as stated above, the arbitration of such a dispute or difference shall not commence unless an attempt has in the first instance been made by the parties to settle such dispute or difference amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 38.5 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:
 - 15..1 The appointment of a replacement Project Manager upon the said person ceasing to act.

- 15..2 Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
- 15...3 Whether or not a certificate has been improperly withheldor is not in accordance with these Conditions.
- 15..4 Any dispute or difference arising in respect of war risks or war damage.
- 38.6 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 Employer and the Contractor agree otherwise in writing.
- 38.7 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.
- 38.8 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.
- 38.9 The award of such Arbitrator shall be final and binding upon the parties.

SECTION V: APPENDIX TO CONDITIONS OF CONTRACT

The Employer is

Name: COUNTY GOVERNMENT OF KIRINYAGA

Address: P.O BOX 260 -10304, KUTUS

Name of Authorized Representative: CHIEF OFFICER, COUNTY DEPARTMENT OF

ROADS, TRANSPORT AND PUBLIC WORKS.

Telephone:

Email:

The Project Manager is

Name: DIRECTOR OF PUBLIC WORKS, COUNTY DEPARTMENT OF TRANSPORT,

ROADS AND PUBLIC WORKS, KIRINYAGA COUNTY.

Address: P.O BOX 390 KERUGOYA
Telephone: 020 215 3369/ 0789 218 976
Email: kirinyagacountyworks@gmail.com

The name (and identification number) of the Contract is

TENDER FOR PROPOSED INSTALLATION OF 20M HIGH MAST FLOOD LIGHT FOR VARIOUS WARD, KIRINYAGA COUNTY TENDER NEG NO: 837129-2020-2021

The Works consist of CONSTRUCTION OF REINFORCED CONCRETE BASES AND ERECTION OF 20M HIGH MAST FLOOEDLIGHT COMPLETE WITH ALL NECESSARY FITTINGS, ACCESSORIES, CONNECTIONS, TESTS AND COMMISSIONING as described in the Bills of Quantities.

The Start Date shall be AGREED WITH THE PROJECT MANAGER

The Intended Completion Date for the whole of the Works is stated in the Appendix to the Conditions of Contract herein.

The following documents also form part of the Contract: Documents listed in **clause 2.1** conditions of contract

The Contractor shall submit a revised program for the Works within 7 days of delivery of the Letter of Acceptance.

The Site Possession Date shall be AGREED WITH THE PROJECT MANAGER

The Site is located at - In various wards as described in every LOT

The Defects Liability period is **180** days from the date of Practical Completion.

Other Contractors, utilities etc., to be engaged by the Employer on the Site Include those for the execution of;

1. None

The minimum insurance covers shall be:

- Contractor's ALL RISK INSURANCE
- 1. The minimum cover for insurance of the Works and of Plant and Materials in respect of contractor's faulty design is **N/A**
- 2. The minimum cover for loss or damage to Equipment is N/A
- 3. The minimum for insurance of other property is N/A
- 4. The minimum cover for personal injury or death insurance
 - For the Contractor's employees is Kshs 5,000,000 (Five Million)
 - And for other people is Kshs 5,000,000 (Five Million)

The following events shall also be Compensation Events:

1. Those listed in the conditions of contract

The period between Program updates is 30 days.

The amount to be withheld for late submission of an updated Program is Kshs "Full Certificate"

The proportion of payments retained is **10%**. Limit of retention is **10%** of contract sum.

The Price Adjustment Clause SHALL NOT apply

The liquidated damages for the whole of the Works is Kshs. **0.05%** of the Contract Sum per day

The Performance Security shall be for the following minimum amounts equivalent as a percentage of the Contract Price **Five** percent (5%)

The Completion Period for the Works is 6 WEEKS

The schedule of basic rates used in pricing by the Contractor is as attached [Contractor not to attach].

Advance Payment shall not be granted.

SECTION VIII- STANDARD FORMS

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FORM OF POWER OF ATTORNEY

(All bidders shall complete this form otherwise; their bids shall be considered as non-responsive)

We	(Name of Bidder)
having our offices located inand Building) duly authorise	
for and on behalf of the bidder) to act for and on to the execution of works as stipulated under	,
TENDER FOR PROPOSED INSTALLATION OF FOR VARIOUS WARD, KIRINYAGA COUNTY	20M HIGH MAST FLOOD LIGHT
Duly signed and delivered:	
Name of appointed attorney:	
Signature of appointed attorney:	
Witnessed by:	
1. Name of First Company Director:	
Signature:	
2. Name of Second Company Director: _	
Signature:	
Company Seal:	

Name and Title

FORM OF TENDER

Office of the County Secretary, County Government of Kirinyaga, P.O. Box 260 - 10304 KUTUS
Date:,
Dear Sir,
REF: TENDER FOR PROPOSED INSTALLATION OF 20M HIGH MAST FLOOD LIGHT FOR VARIOUS WARD, KIRINYAGA COUNTY
In accordance with the Instructions to Tenderers, Conditions of Bid, Specifications and Bills of Quantities for the execution of the above named works, we, the undersigned offer to perform the works and remedy any defects therein for the sum of:
Kshs
[Amount in words]
We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Employer's Representative's notice to commence, and to complete the whole of the Works comprised in the Contract within
We agree to abide by this tender for a period of 120 days from the date of bid opening and shall remain binding upon us and may be accepted at any time before that date.
Unless and until a formal Agreement is prepared and executed this bid together with your written acceptance thereof, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any tender you may

receive.

	Address			
Witness:	Name		•••	
VAT CERT	rificate no			
PIN No				
	[Address of Bidde	r]		
duly autho	orized to sign tenders for and on behalf of:			
	in	the	capacity	of
Dated this	day of20			

3 LETTER OF NOTIFICATION OF AWARD

		Address of Procuring Entit	ty
	Tender No		
	Tender Name		
	s is to notify that the contract/s state been awarded to you.	ated below under the above n	
1.	. Please acknowledge receipt of acceptance.	this letter of notification	signifying your
2.	2. The contract/contracts shall be date of this letter but not earlier t	· · ·	2
3.	you may contact the officer(s) with matter of this letter of notification		w on the subject
	(FULL PARTICULARS)		<u>_</u>

SIGNED FOR ACCOUNTING OFFICER

4 FORM OF CONTRACT AGREEMENT

	S AGREEMENT, made the		
	INTY GOVERNMENTOF KIRINYAGA of		
P.O 1	BOX 260 - 10304, KUTUS, KENYA (her	reinafter called "t	the Employer") of the one
part	AND		
			of [or whose registered
office	e is situated at]		_(hereinafter called "the
Cont	tractor") of the other part.		
WHE	REAS the Employer is desirous that certain wo	orks should be exec	cuted, viz
TEN	DER FOR PROPOSED INSTALLATION	N OF 20M HIGH	H MAST FLOOD LIGHT
	VARIOUS WARD, KIRINYAGA CO		
	129-2020/2021 (hereinafter called "the"		
	the Employer has accepted the tende		
	eution and completion of such Works and		
	Contract Price of	and a single	j de g
Kshs	s	[Amount in	figures], Kenya Shillings
		•••••	
	[Am	nount in words].	
NOW	V THIS AGREEMENT WITNESSETH as fo	ollows:	
			_
1.	In this Agreement, words and express		
	respectively assigned to them in the C	conditions of Con	tract hereinafter referred
	to.		
_	771 (11) 1 1 1 1	1 1	1 1 11 1 1 1
2.	The following documents shall be d		and shall be read and
	construed as part of this Agreement i.e	e.	
0	The Conditions of Contract (FIDIC IV) Part 2		
a. b.			
c.			
d.	1 1		
e.	m		
f.			
g.			
h.			
i.			

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter

mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works

and remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer 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 thereto have caused this Agreement to be executed the day and year first before written.

The common Seal of	
Was hereunto affixed in the presence of	
Signed Sealed, and Delivered by the said	
Binding Signature of Employer	
Binding Signature of Contractor	
In the presence of (i) Name	
Address	
Signature	
[ii] Name	
Address	
Signature	

5 FORM OF TENDER SECURITY

subm	nitted his tender dated	(hereinafter called "the Tenderer") has for the construction of
	(name of Contract)	••••••
regist Kshs. Empl	tered office at(hereina (hereinafter called for which payme oyer, the Bank binds itself, its succe	that WE
THE (CONDITIONS of this obligation are:	
1.	If after tender opening the tenderer tender validity specified in the instru Or	withdraws his tender during the period of actions to tenderers
2.	If the tenderer, having been notific Employer during the period of tende	ed of the acceptance of his tender by the r validity:
	Instructions to Tenderers, if re	Performance Security, in accordance with
	his first written demand, without demand, provided that in his demand	rer up to the above amount upon receipt of the Employer having to substantiate his and the Employer will note that the amount g to the occurrence of one or both of the two condition or conditions.
	<u> </u>	up to and including thirty (30) days after ny demand in respect thereof should reach e.
	[date[[signature of the Bank]
	[witness]	[seal]

FORM OF PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

,
To The Chief Officer,
County Department of Roads, Transport and Public Works P.O BOX 390 KERUGOYA
WHEREAS
CONSTRUCTION OF FLOOD LIGHTS WITHIN KIRINYAGA COUNTY
, (hereinafter called the "Contract")
AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified in the
Appendix to Form of Bid as security for compliance with his obligations in accordance with the Contract;
AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;
NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of
Kshs(amount in figures)
Kshs
(amount in words)
and we undertake to payment to you, upon your first written demand and without cavil or argument, any sum or sums within and up to the limits as aforesaid without your needing to prove or show grounds or reasons for the sum specified therein.

We hereby waive the necessity of you demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract Documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee and we hereby waive notice of any such change, addition or modification

This Guarantee shall be valid until 28 days after issuing of the Defects Liability Certificate.

AUTHORIZED SIGNATURE OF THE BANK	••••
Name of Signatory	
Name of bank	
AddressDate	

6 TENDER QUESTIONNAIRE

	Please fill in block letters.
1.	Full names of tenderer
2.	Full address of tenderer to which tender correspondence is to be sent (unless an agent has been appointed below)
3.	Telephone number (s) of tenderer
1.	Telex address of tenderer
5.	Name of tenderer's representative to be contacted on matters of the tende during the tender period
ó .	Details of tenderer's nominated agent (if any) to receive tender notices. This is essential if the tenderer does not have his registered address in Kenya (name address, telephone, telex)
	Signature of Tenderer
	Make copy and deliver to:(Name of Employer)

7 CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2 (b) or 2 (c) and 2 (d) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

Part 1 – General
Business Name
Location of business premises; Country/Town
Plot No Street/Road
Postal Address Tel No
Nature of Business
Current Trade Licence No Expiring date
Maximum value of business which you can handle at any time: Kapound
Name of your bankers
Branch
Part 2 (a) – Sole Proprietor
Your name in full Age
Nationality Country of Origin
*Citizenship details
Part 2 (b) – Partnership
Give details of partners as follows:
Name in full Nationality Citizenship Details Shares
2
3

Part 2(c) – Registered	Company:	
Private or public		
State the nominal and i	ssued capital of the Com	npany-
Nominal Kshs		
Issued Kshs		
Give details of all direct	ors as follows:	
Name in full. Nationa	lity. Citizenship Detai	ils*. Shares.
1.		
2.		
3.		
4.		
Part 2(d) – Interest in	the Firm:	
	ersons ins/No(i	(Name of Employer) who has (Delete as necessary)
I certify that the informa	ation given above is corre	rect.
(Title)	(Signature)	(Date)
Attach proof of citizensh	nip	

68 | P a g e

TENDER - SECURING DECLARATION FORM

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

Date:	-	
Tender No		
For:		

To: The County Government of Kirinyaga P. O. Box 260 -10304 Kutus

We, the undersigned, declare that:

- 1. We understand that, according to your conditions, bid must be supported by a Bid Securing Declaration.
- 2. We accept that we will be automatically be suspended from being eligible for bidding 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 bid during the period of bid validity; 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 Tenderers
- 3. We understand that this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of
 - (i) our receipt of a copy of your notification of the name of the successful Bidder; or
 - (ii) twenty-eight days after the expiration of our Tender
- 4. We understand that if we are a Joint Venture, the Bid Securing Declaration must be in the name of the Joint Venture that submits bid and the Joint Venture has not been legally constituted at the time of bidding, the Bid

Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed:
[insert signature of person whose name and capacity are shown] In the capacity of:
[insert legal capacity of person signing the Bid Securing Declaration]
Name:
[insert complete name of person signing the Bid Securing Declaration]
Duly authorized to sign the bid for and on behalf of:
lineart complete name of Didderl
[insert complete name of Bidder]
Dated on

QUALIFICATION INFORMATION

1. Individual Tenderers or Individual Members of Joint Ventures

1.1	Constitution or legal status of tenderer (attach copy or Incorporati Certificate); Place of registration:							
	Principal place of business							
	Power of attorney of signatory of tender							
1.2	Total ar	nnual volume of	construction work performed in the last five years					
Year		Volume						
		Currency	Value					
1.3	_		in Contractor on works of a similar nature and ve years. Also list details of work under way or					

committed, including expected completion date.

Project	Name	of	client	Type	of	work	Value	of	Completion
name	and	cc	ontact	perfor	med	and	Contra	ct	Status
	person			year		of			
				compl	etion	1			

Major items of Contractor's Equipment proposed for carrying out the 1.4 Works. List all information requested below.

Item of	Description,	Condition (new,	Owned, leased
Equipment	•	good, poor) and	
	(years)	number available	(from whom?)

Qualifications 1.5 and experience of key personnel proposed for administration and execution

of the Contract. Attach biographical data.

Position	Name	Years of experience	Years	of
		(general)	experience	in
			proposed positi	on
Project				
Project Manager,				
etc.				

etc.					
6		_	ast five years: baland rts, etc. List below an	· -	d loss
7	requirem		nancial resources to nd, lines of credit, etc nents.	-	
3	•	<u>-</u>	one, telex and facsimi ntacted by the Emplo		s that
9		nt of compliance ions to Tenderers.	with the requiremen	ats of Clause 1.2 o	of the

1.10 Proposed program (work method and schedule) for the whole of the Works.

3 Joint Ventures

- 3.4 The information listed in 1.1 1.10 above shall be provided for each partner of the joint venture.
- 3.5 The information required in 1.11 above shall be provided for the joint venture.
- 3.6 Attach the power of attorney of the signatory(ies) of the tender authorizing signature of the tender on behalf of the joint venture

- 3.7 Attach the Agreement among all partners of the joint venture (and which is legally binding on all partners), which shows that:
 - a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
 - b) one of the partners will be nominated as being in charge, authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture; and
 - c) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

DETAILS OF DOMESTIC SUB-CONTRACTORS

If the Tenderer wishes to sublet any portions of the Works under any heading, he must give below details of the sub-contractors he intends to employ for each portion.

Failure to comply with this requirement may invalidate the tender.

	(1)	Port	ion of Works to be	sublet:	
[i)			of Sub-contractor ss of head office:		
(ii)	of sin	milar y	actor's experience works carried out 3 years with value:		
	(2)	Port	ion of Works to sub	olet:	
		(i)	Full name of sub and address of h		
(ii)	of si	milar y	actor's experience works carried out 3 years with		

contract value:	
Signature of Tenderer)	Date

FORM SD1

SELF DECLARATION FORMS (r 62)

REPUBLIC OF KENYA

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)

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

THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of
. THAT the aforesaid Bidder, its Directors and subcontractors have not been ebarred from participating in procurement proceeding under Part IV of the Act.
. THAT what is deponed to hereinabove is true to the best of my knowledge aformation and belief.
Citle) (Signature) (Date)
idder Official Stamp

Note: This form <u>MUST</u> be filled, signed and submitted by all the bidders participating in this tender. This is a mandatory requirement under the new Public Procurement Asset and Disposal Act 2015 that came into effect on 7th January 2016

FORM SD2 SELF DECLARATION FORMS (r 62) REPUBLIC OF KENYA

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) SELF DECLARATION THAT THE PERSON/TENDERER WILL NOT ENGAGE IN ANY CORRUPT OR FRAUDULENT PRACTICE.

I, being a resident of being a statement
as follows:-
1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of
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(insert name of the Procuring entity) 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(name of the procuring entity)
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 hereinabove is true to the best of my knowledge information and belief.
(Title) (Signature) (Date) Bidder's Official Stamp

Note: This form \underline{MUST} be filled, signed and submitted by all the bidders participating in this tender. This is a mandatory requirement under the new Public Procurement Asset and Disposal Act 2015 that came into effect on 7^{th} January 2016

FORM RB 1 REPUBLIC OF KENYA

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NOOF20
BETWEEN
APPLICANT
AND
Request for review of the decision of the (Name of the Procuring Entity) of
dated theday of20in the matter of Tender No
20
REQUEST FOR REVIEW
I/We,the above named Applicant(s), of address: Physical
addressFax NoTel. NoEmail, hereby request the Public
Procurement Administrative Review Board to review the whole/part of the above
mentioned decision on the following grounds , namely:-
1.
2.
etc.
By this memorandum, the Applicant requests the Board for an order/orders that: -
1.
2.
etc
SIGNED(Applicant)
Dated onday of/20
FOR OFFICIAL USE ONLY
Lodged with the Secretary Public Procurement Administrative Review Board on
day of20
SIGNED Board Secretary

KEY PERSONNEL

	1	T	T
DESIGNATION	NAME	NATIONALITY	SUMMARY OF
			QUALIFICATIONS AND
			EXPERIENCE
Headquarters:			
1. Director			
2.			
3.			
4.			
5.			
etc.			
Site Office:			
1. Site			
Superintendent			
2.			
3.			
4.			
5.			
etc.			

I certify that the above i	nformation	is correct.	
(Title)	 (Sig	nature)	(Date)

SCHEDULE OF COMPLETED CIVIL WORKS CARRIED OUT BY THE TENDERER IN THE LAST EIGHT YEARS

DESCRIPTION	TOTAL VALUE	CONTRACT	YEAR COMPLETED
OF WORKS AND	OF WORKS	PERIOD	
CLIENT	(KSHS)	(YEARS)	

I certify that the above Civil V	Vorks were successfully	carried out and	completed by
ourselves.			
		•••••	
(Title)	(Signature)	(Date)	

*Value in Kshs using Central Bank of Kenya mean exchange rate at a reference date 30 days before date of tender opening.

SCHEDULE OF ONGOING PROJECTS

DESCRIPTION OF WORK AND CLIENT	CONTRACT PERIOD	DATE OF COMMEN- CEMENT	DATE OF COMPLETION	TOTAL VALUE OF WORKS (KSHS.)	PERCENTAGE COMPLETED TO DATE

I certify that the above above information is c	9	carried out by ourselves and that the
(Title)	(Signature)	(Date)

OTHER SUPPLEMENTARY INFORMATION

	•••••					
	h in hand, lines of cr	rces to meet the qualificated redit etc. List below and att				
	•••••					
	ephone, telex, fax nur ference if contacted by	nbers of the Tenderer's Bank y the Employer.				
	•••••					
Information on current litigation in which the Tenderer is involved.						
OTHER PARTY (IES)	CAUSE OF DISPUTE	AMOUNT INVOLVED (KSHS)				

SECTION IX - SPECIFICATIONS

Notes for preparing Specifications

- 1.0 Specifications must be drafted to present a clear and precise statement of the required standards of materials and workmanship for tenderers to respond realistically and competitively to the requirements of the Employer and ensure responsiveness of tenders. The Specifications should require that all materials, plant and other supplies to be incorporated in the permanent Works be new, unused, of the most recent or current models and incorporating all recent improvements in design and materials unless provided otherwise in the Contract. Where the Contractor is responsible for the design of any part of the permanent Works, the extent of his obligations must be stated.
- 2.0 There are considerable advantages in standardizing **General Specifications** for repetitive Works in recognized public sectors, such as highways, urban housing, irrigation and water supply. The General Specifications should cover all classes of workmanship, materials and equipment commonly involved in construction works, although not necessarily to be used in a particular works contract. Deletions or addenda should then adapt the General Specifications to the particular Works.
- 3.0 Care must be taken in drafting Specifications to ensure they are not restrictive. In the specifications of standards for materials, plant and workmanship, existing Kenya Standards should be used as much as possible, otherwise recognized International Standards may also be used.
- 4.0 The Employer should decide whether technical solutions to specified parts of the Works are to be permitted. Alternatives are appropriate in cases where obvious (and potentially less costly) alternatives are possible to the technical solutions indicated in tender documents for certain elements of the Works, taking into consideration the comparative specialized advantage of potential tenderers.

The Employer should provide a description of the selected parts of the Works with appropriate reference to Drawings, Specifications, Bills of Quantities, and Design or Performance criteria, stating that the alternative solutions shall be at least structurally and functionally equivalent to the basic design parameters and Specifications.

Such alternative solutions shall be accompanied by all information necessary for a complete evaluation by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, proposed construction methodology and other relevant details. Technical alternatives permitted in this manner shall be considered by the Employer each on its own merits and independently of whether the tenderer has priced the item as described in the Employer's design included with the tender documents

GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

- 2.1 General
- 2.2 Standard of Materials
- 2.3 Workmanship
- 2.4 Procurement of Materials
- 2.5 Shop Drawings
- 2.6 Record Drawings
- 2.7 Regulations and Standards
- 2.8 Setting out Works
- 2.9 Position of Electrical Plant and Apparatus
- 2.10 M.C.B Distribution Panels and Consumer Units
- 2.11 Fused Switchgear and Isolators
- 2.12 Conduits and Conduit Runs
- 2.13 Conduit Boxes and Accessories
- 2.14 Labels
- 2.15 Earthing
- 2.16 Cables and Flexible Cords
- 2.17 Armoured PVC Insulated and Sheathed Cables
- 2.18 Cable Supports; Markers and Tiles
- 2.19 PVC Insulated Cables
- 2.20 Heat Resisting Cables
- 2.21 Flexible Cords
- 2.22 Cable Ends and phase Colours
- 2.23 Cable Insulation Colours
- 2.24 Sub-circuit Wiring
- 2.25 Space Factor
- 2.26 Insulation
- 2.27 Lighting Switches
- 2.28 Sockets and Switched sockets
- 2.29 Fused Spur Boxes
- 2.30 Cooker Outlets
- 2.31 Connectors
- 2.32 Lamp holders
- 2.33 Lamps
- 2.34 lighting Fittings Street lighting Lanterns
- 2.35 Position of Points and Switches
- 2.36 Street/Security Lighting Columns
- 2.37 Timing Control Switch
- 2.38 Wiring System for Street Lighting
- 2.39 Metal control Pillar
- 2.40 Current Operated Earth leakage circuit breaker
- 2.41 MV Switchboard
- 2.42 Steel Conduits and Steel Trunking
- 2.43 Testing on Site

2.1 SHOP DRAWINGS

Before manufacture or Fabrication is commenced the sub-contractor shall submit Two copies of detailed drawings of all control pillars, meter cubicles, medium voltage switchboards including their components showing all pertinent information including sizes, capacities, construction details, etc, as may be required to determine the suitability of the equipment for the approval of the Engineer. Approval of the detailed drawings shall not relieve the sub-contractor of the full responsibility of errors or the necessity of checking the drawings himself or of furnishing the materials and equipment and performing the work required by the plans and specifications.

2.2 RECORD DRAWINGS

These diagrams and drawings shall show the completed installation including sizes, runs and arrangements of the installation. The drawings shall be to scale not less than 1:50 and shall include plan views and section.

The drawings shall include all the details which may be useful in the operation, maintenance or subsequent modifications or extensions to the installation.

Three sets of diagrams and drawings shall be provided, all to the approval of the Engineer.

One coloured set of line diagrams relating to operating and maintenance instructions shall be framed and, mounted in a suitable location.

2.3 REGULATIONS AND STANDARDS

All work executed by the Sub-contractor shall comply with the current edition of the "Regulations" for the Electrical Equipment of Buildings, issued by the Institution of Electrical Engineers, and with the Regulations of the Local Electricity Authority.

Where the two sets of regulations appear to conflict, they shall be clarified with the Engineers. All materials used shall comply with relevant Kenya Bureau of Standards Specification.

2.4 SETTING OUT WORK

The sub-contractor at his own expenses; is to set out works and take all measurements and dimensions required for the erection of his materials on site; making any modifications in details as may be found necessary during the progress of the works, submitting any such modifications or alterations in detail to the Engineer before proceeding and must allow in his Tender for all such modifications and for the provision of any such sketches or drawings related thereto.

2.5 POSITIONS OF ELECTRICAL PLANT AND APPARATUS

The routes of cables and approximate positions of switchboards etc, as shown on the drawings shall be assumed to be correct for purpose of Tendering, but exact positions of all electrical Equipment and routes of cables must be agreed on site with the Engineer before any work is carried out.

2.6 MCB DISTRIBUTION PANELS AND CONSUMER UNITS

All cases of MCB Panels and consumer units shall be constructed in heavy gauge sheet with hinged covers.

Removable undrilled gland plates shall be provided on the top and bottom of the cases. Miniature circuit breakers shall be enclosed in moulded plastic with the tripping mechanism and arc chambers separated and sealed from the cable terminals.

The operating dolly shall be tripfree with a positive movement in both make and break position. Clear indication of the position of the handle shall be incorporated.

The tripping mechanism shall be on inverse characteristic to prevent tripping in temporary overloads and shall not be affected by normal variation in ambient temperature.

A locking plate shall be provided for each size of breaker; A complete list of circuit details on typed cartridge paper glued to stiff cardboards and covered with a sheet of perspex, and held in position with four suitable fixings, shall be fitted to the inner face of the lids of each distribution panel. The appropriate MCB ratings shall be stated on the circuit chart against each circuit in use: Ivorine labels shall be secured to the insulation barriers in such a manner as to indicate the number of the circuits shown on the circuit chart.

Insulated barriers shall be fitted between phases, and neutrals in all boards, and to shroud live parts.

Neutral cables shall be connected to the neutral bar in the same sequence as the phase cables are connected to the MCB's. This shall also apply to earth bars when installed.

2.7 FUSED SWITCHGEAR AND ISOLATORS

All fused switchgear and isolators whether mounted on machinery, walls or industrial panels shall conform to the requirements of KS 04 – 226 PART: 1: 1985.

All contacts are to be fully shrouded and are to have a breaking capacity on manual operations as required by KS 04 - 182: 1980.

Fuse links for fused switches are to be of high rupturing capacity cartridge type, conforming to KS 04 – 183 : 1978.

Isolators shall be load breaking/fault making isolators.

Fused switches and isolators are to have separate metal enclosures. Mechanical interlocks are to be provided between the door and main switch operating mechanism so arranged that the door may not be opened with the switch in the 'ON' position. Similarly; it shall not be possible to close the switch with the door open except that provision to defeat the mechanical interlock and close the switch with the door in the open position for test purposes. The 'ON' and 'OFF' positions of all switches and isolators shall be clearly indicated by a mechanical flag indicator or similar device. In T.P & N fused switch units, bolted neutral links are to be fitted.

2.8 CONDUITS AND CONDUIT RUNS

Conduit systems are to be installed so as to allow the loop-in system of wiring:

All conduits shall be black rigid super high impact heavy gauge class 'A' PVC in accordance with KS 04 – 179: 1988 and IEE Regulations. No conduit less than 20mm in diameter shall be used anywhere in this installation.

Conduit shall be installed buried in plaster work and floor screed except when run on wooden or metal surface when they will be installed surface supported with saddles every 600mm. Conduit run in chases shall be firmly held in position by means of substantial pipe hooks driven into wooden plugs.

The Sub-contractors attention is drawn to the necessity of keeping all conduits entirely separate from other piping services such as water and no circuit connections will be permitted between conduits and such pipes.

All conduits systems shall be arranged wherever possible to be self-draining to switch boxes and conduit outlet points for fittings:

The systems, when installed and before wiring shall be kept plugged with well fitting plugs and when short conduit pieces are used as plugs, they shall be doubled over and tied firmly together with steel wire; Before wiring all conduit systems shall be carried out until the particular section of the conduit installation is complete in every respect.

The sets and bends in conduit runs are to be formed on site using appropriate size bending springs and all radii of bends must not be less than 2.5 times the outside diameter of the conduit. No solid or inspection bends, tees or elbows will be used.

Conduit connections shall either be by a demountable (screwed up) assembly or adhesive fixed and water tight by solution. The tube and fittings must be clean and free of all grease before applying the adhesive. When connections are made between the conduit and switch boxes, circular or non-screwed boxes, care shall be taken that no rough edges of conduit stick out into the boxes.

Runs between draw in boxes are not to have more than two right angle bends or their equivalent. The sub-contractor may be required to demonstrate to the Engineers that wiring in any particular run is easily withdrawable and the sub-contractor may,

at no extra cost to the contract; be required to install additional draw-in boxes required. If conduit is installed in straight runs in excess of 6000mm, expansion couplings as manufactured by Egatube shall be used at intervals of 6000mm.

Where conduit runs are to be concealed in pillars and beams, the approval of the Structural Engineer, shall be obtained. The sub-contractor shall be responsible for marking the accurate position of all holes, chases etc, on site, or if the Engineer so directs, shall provide the Main Contractor with dimensional drawings to enable him to mark out and form all holes and chases. Should the sub-contractor fail to inform the main contractor of any inaccuracies in this respect they shall be rectified at the sub-contractors expense.

It will be the Sub-contractors responsibility to ascertain from site, the details of reinforced concrete or structural steelwork and check from the builder's drawings the positions of walls, structural concrete and finishes. No reinforced concrete or steelwork may be drilled without first obtaining the written permission of the Structural Engineer.

The drawings provided with these specifications indicate the appropriate positions only of points and switches, and it shall be the Sub-Contractors responsibility to mark out and centre on site the accurate positions where necessary in consultation with the Architect and the Engineer. The sub-contractor alone shall be responsible for the accuracy of the final position.

2.13 CONDUIT BOXES AND ACCESSORIES

All conduit outlets and junction boxes are to be either malleable iron and of standard circular pattern of the appropriate type to suit saddles being used or super high impact PVC manufactured to KS 04 - 179 : 1983.

Small circular pattern boxes are to be used with conduits up to and including 25mm outside diameter. Rectangular pattern adaptable boxes are to be used for conduits of 32mm outside diameter and larger. For drawing in of cables in exposed runs of conduit, standard pattern through boxes are to be used:

Boxes are to be not less than 50mm deep and of such dimensions as will enable the largest appropriate number of cables for the conduit sizes to be drawn in without excessive bending.

Outlet boxes for lighting fittings are to be of the loop-in type where conduit installation is concealed and the sub-contractor shall allow one such box per fitting, except where fluorescent fittings are specified when two such boxes per fitting shall be fitted flush with ceiling and if necessary fitted with break joint rings. Pattresses shall be fitted where required to outlets on surface conduit runs.

Adaptable boxes are to of PVC or mild steel (of not less than 12swg) and black enamelled or galvanised finish according to location. They shall be of square or

oblong shape location. They shall be of square or oblong shape complete with lids secured by four 2 BA brass roundhead screws; No adaptable box shall be less than 75mm x 75mm x 50mm or larger than 300mm x 300mm x 75mm and shall be adequate in depth in relation to the size of conduit entering it. Conduits shall only enter boxes by means of conduit bushes.

2.14 LABELS

Labels fitted to switches and fuseboards;-

- (i) Shall be Ivorine engraved black on white.
- (ii) Shall be secured by R.H brass screws of same manufacturing throughout.
- (iii) Shall be indicated on switches:
 - a) Reference number of switch
 - b) Special current rating
 - c) Item of equipment controlled
- (iv) Shall indicate on MCB panels
 - a) Reference number
 - b) Type of board, i.e;, lighting, sockets, etc,.
 - c) Size of cable supplying panel
 - d) where to isolate feeder cable
- (v) Shall be generally not less than 75mm x 50mm.

2.15 EARTHING

The earthing of the installation shall comply with the following requirements;-

- (i) It shall be carried out in accordance with the appropriate sections of the current edition of the Regulations, for the Electrical Equipment of Buildings issued by Institute of Electrical Engineers of Great Britain.
- (ii) At all main distribution panels and main service positions a 25mm x 3mm minimum cross sectional area Copper tape shall be provided and all equipment including the lead sheath and armouring of cables, distribution boards and metal frames shall be bonded thereto.

- (iii) The earth tape in Sub-clause (ii) shall be connected by means of a copper tape or cable of suitable cross sectional area to an earth electrode which shall be a copper earth rod (see later sub-clause).
- (iv) All tapes to be soft high conductivity copper, untinned except where otherwise specified and where run underground on or through walls, floors, etc., it shall be served with corrosion resisting tape or coated with corrosion compound and braided.
- (v) Where the earth electrode is located outside the building a removable test link shall be provided inside the building as near as possible to the point of entry to the tape, for isolating the earth electrode for testing purposes.
- (vi) Earthing of sub-main equipment shall be deemed to be satisfactory where the sub-main cables are M.I.C.S. or conduit with separate earth wire, and installation is carried out in accordance with the figures stated in the current edition of the I.E.E Regulations.
- (vii) Where an earth rod is specified (see Sub-clause (iii) it shall be proprietary manufacture, solid hand drawn copper of 15mm diameter driven into the ground to a minimum depth of 3.6m. It shall be made up to 1.2m sections with internal screw and socket joints and fitted with hardened steel tip and driving cap.
- (viii) Earth plates will not be permitted
- (ix) Where an earth rod is used the earth resistance shall be tested in the manner described in the current edition of the IEE Regulations, by the Sub-Contractor in the presence of the Engineer and the Sub-Contractor shall be responsible for the supply of all test equipment.
- (x) Where copper tape is fixed to the building structure it structure it shall be by means of purpose made non-ferrous saddles which space the conductor away from the structure a minimum distance of 20mm. Fixings, shall be made using purpose made plugs; No fixings requiring holes to be drilled through the tape will be accepted.
- (xi) Joints in copper tape shall be tinned before assembly riveted with a minimum of two copper rivets and seated solid.
- (xii) Where holes are drilled in the earth tape for connection to items of equipment the effective cross sectional area must not be less than required to comply with the IEE regulations.
- (xiii) Bolts, nuts and washers for any fixing to the earth tape must be of non-ferrous material.

(xiv) Attention is drawn to the need for the earthing metal parts of lighting fittings and for bonding ball joint suspension in lighting fittings.

2.16 CABLES AND FLEXIBLE CORDS

All cables used in this Sub-Contract shall be manufactured in accordance with the current appropriate Kenya standard Specification which are as follows:-

P.V.C. Insulated Cables and Flexible Cords - Ks 04-192:1988

PVC Insulated Armoured Cables - Ks 04-194:1990

Armouring of Electric cables - Ks 04-290:1987

The successful Sub-Contractor will, at the Engineers discretion be required to submit samples of cables for the Engineers approval; the Engineer reserves the right to call for the cables of an alternative manufacture without any extra cost being incurred. P.V.C. insulated cables shall be 500/1000 volt grade. No cables smaller than 1.5mm² shall be used unless otherwise specified. The installation and the finish of cables shall be as detailed in later clauses. The colour of cables shall conform with the details stated in the "Cable Braid and insulation Colours" Clause.

2.17 ARMOURED P.V.C. INSULATED AND SHEATHED CABLES:

Shall be 600/1000 volt grade manufactured to Ks 04-194:1988 and Ks 04-187/188 with copper stranded conductors.

The wire armour of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armour shall have a resistance not more than twice of the largest current carrying conductor of the cable.

P.V.C./S.W.A./P.V.C. cables shall be terminated using "Telecom" "B" type or approved equal or approved equal glands and a P.V.C. tapered sleeve shall be provided to shroud each gland.

Where cables rise from floor level to switchgear etc., they shall be protected by P.V.C. conduit, to a height of 600mm from finished floor level, whether the cable is run on the surface or recessed into the wall.

2.18 CABLE SUPPORTS, MARKERS AND TILES

All PVC/SWA/PVC cables run inside the building shall be fixed in rising ducts or on ceilings by means of die cost cables hooks or clamps, or appropriate size to suit cables, fixed by studs and back nuts to their channel sections.

Alternatively, fixing shall be by BICC claw type cleating system with die-cast cleats and galvanised mild steel back straps or similar approved equal method. For one or two cables run together the cleats shall be fixed a special channel section supports or backstraps described above which shall in turn be secured to walls or ceilings of ducts by rawbolts.

In excessively damp or corrosive atmospheric conditions special finishes may be required and the Sub-contractor shall apply to the Engineer for further instructions before ordering cleats and channels for such areas.

The above type of hooks and clamps and channels or cleats and blackstraps shall also be used for securing cables in vertical ducts.

Cables supports shall be fixed at 600mm maximum intervals, the supports being supplied and erected under this Sub-contract. Saddles shall not be used for supporting cables nor any other type of fixing other than one of the two methods described above or other system which has received prior approval of the Engineer;

Cables are to be kept clear of all pipe work and the Sub-contractor shall work in close liaison with other services Sub-contractors.

The Sub-Contractor shall include for the provision of fixing of approved type colored slip on cables end markers to indicate permanently the correct phase and neutral colours on all ends.

Provision shall be made for supplying and fixing approved non-corrosive metal cable markers to be attached to the outside of all PVC/SWA/PVC cables at 15mm intervals indicating cable size and distinction.

Where PVC/SWA/PVC cables are outside the building they shall be laid underground 750mm deep with protecting concrete interlocking cover tiles laid over which shall be provided and laid under this Sub-contract.

All necessary excavations and reinstatement of ground including sanding or trenches will be carried out by the Sub-Contractor, unless otherwise stated.

2.19 PVC INSULATED CABLES

Shall be of non-braided type as CMA reference 6491 x 600/1000/1000 volt grade cables, or equal approved.

PVC cables shall conform to the details of the "Cables and Flexible cords" and "Cable Braid and Insulation Colours" clauses.

2.20 HEAT RESISTING CABLES

Final connections to cookers, water heaters, etc., shall be made using butyl rubber insulated cable as CMA reference 610 butyl (Single core 600/1000 Volt).

This type of cable shall be used in all instances where a temperature exceeding 100°F, but not exceeding 150°F is likely to be experienced. Final connections to all lighting fittings (and other equipment where a temperature in excess of 150°c likely to be experienced) shall be made using silicon rubber insulated cable or equal and approved.

2.21 FLEXIBLE CORDS

Shall be in accordance with the "Cable and Flexible Cords" clause. No cord shall be less than 24/0.2mm in size unless otherwise specified.

Circular white twin TRS flex shall be used for plain pendant fittings up to 100 watts. For all other types of lighting fittings the flexible cable shall be silicone rubber insulated.

No polythene insulated flexible cable shall be used in any lighting fitting or other appliance (see "Heat Resisting Cables" Clause 30).

2.22 CABLE ENDS AND PHASE COLOURS

All cable ends connected up in switchgear, MCB panels etc;, shall have the insulation carefully cut back and the ends sealed with Hellerman rubber slip on cable end markers.

The markers shall be of appropriate phase colour for switch and all other live feeds to the details of the "Cable Insulation Colours" clause. Black cable with black end markers shall only be used for neutral cables.

2.23 CABLE INSULATION COLOURSUnless otherwise stated in later clauses the insulation colours shall be in accordance with the following table.

Where other systems are installed the cable colours shall be in accordance with the details stated in the appropriate clause.

2.2 <u>MA</u>	4 <u>SYSTEM</u> <u>RKER</u>	INSULATION COLOUR	CABLE	END
Mai	in and Sub-Main			
a) b)	Phase Neutral	Red Black		Red Black
Sut a) b)	-Circuit - Single Phase Phase Neutral	Red Black		Red Black

2.25 SUB-CIRCUIT WIRING

For all lighting and sockets wiring shall be carried out in the "looping in" system and there shall be no joints whatsoever. No lighting circuits shall comprise more than 20 points when protected by 10A MCB. Cables with different cross-section area of copper shall not be used in combination.

Lighting circuits P. V.C. cable 1.5mm² for all lighting circuits indicated on the drawing.

Power circuits P.V.C cable (minimum sizes).

- (i) 2.5mm² for one, two or three 5Amp sockets wired in parallel.
- (ii) 2.5mm² for one 15Amp socket.
- (iii) 2.5mm² for maximum of ten switched 13 Amp sockets wired from 30 Amp MCB.

The wiring sizes for lighting circuits and sockets are shown on the drawings. In such cases, the sizes shown on the drawings shall prevail over the sizes specified.

Wiring sizes for other appliances shall be shown on the drawing or specified in later clauses of this specification.

2.26 SPACE FACTOR

The maximum number of cables that may be accommodated in a given size of conduit or trunking or duct is not to exceed the number in Tables B.5 and B.6 or as stated in Regulation B.91, B.117 and B.118 of the I.E.E Regulations whichever is appropriate.

2.27 INSULATION

The insulation resistance to earth and between poles of the whole wiring system, fittings and lumps, shall not be less than the requirements of the latest edition of the I.E.E Regulations. Complete tests shall be made on all circuits by the Sub-contractor before the installations are handed over.

A report of all tests shall be furnished by the Sub-Contractor to the Engineer. The Engineer will then check test with his own instruments if necessary.

2.28 LIGHTING SWITCHES

These shall be mounted flush with the walls, shall be contained in steel or alloy boxes and shall be of the gangs ratings and type shown in the drawings. They shall be as manufactured by M.K. Electrical Ltd., or other equal and approved to KS 04 – 247: 1988

2.29 SOCKETS AND SWITCHED SOCKETS

These shall be flush pattern in steel/pvc box and shall be of the gangs and type specified in the drawings.

They shall be 13- Amp, 3-pin, shuttered, switched and as manufactured by "M.K. Electrical Co. Ltd.", or other approved equal to KS 04 – 246: 1987

2.30 FUSED SPUR BOXES

These shall be flush, D.P switched as in steel/pvc box and of type and make specified in the drawings complete with pilot light and as manufactured by "M. K. Electrical Company Ltd", or other approved equal. KS 04 – 247: 1988

2.31 COOKER OUTLETS

These shall be flush mounted with 13-A switched socket outlet and neon indicator Lamps.

The cooker control units shall be as manufactured by "M.K. Electrical Company Ltd", or other approved equal KS 04 – 247: 1988

2.32 CONNECTORS

Shall be specified in the drawings and appropriate rating. These shall be fitted at all conduit box lighting point outlets for jointing of looped P.V.C cables with flexible cables of specified quality.

2.33 LAMPHOLDERS

Shall be of extra heavy H.O skirted and shall be provided for every specified lighting fitting and shall be B.C;, E.S;, or G.E.S as required. All E.S. and G.E.S. holders shall be heavy brass type (except for plain pendants where the reinforced bakelite type shall be used). The screwed cap of the E.S and G.E.S. holders shall be connected to the neutral.

Where lampholders are supported by flexible cable, the holders shall have "cord grip" arrangements and in the case of metal shades earthing screws shall be provided on each of the holders.

The Sub-Contractor must order the appropriate type of holder when ordering lighting fittings, to ensure that the correct types of holders are provided irrespective of the type normally supplied by the manufacturers.

2.34 **LAMPS**

All lamps shall be suitable for normal stated supply voltage and the number and sizes of lamps detailed on the drawings shall be supplied and fixed. The Sub-Contractor must verify the actual supply voltage with the supply authority before ordering the lamps.

Tungsten filament lamps shall be manufactured in accordance with KS 04 – 112:1978 for general service lamps and KS 04 – 307:1985 for lamps other than general services. Tubular fluorescent lamps shall comply with KS 04 – 464:1982

Pearl lamps shall be used in all fittings unless otherwise specified.

2.35 LIGHTING FITTINGS AND STREET LIGHTING LANTERNS

This Sub-Contract shall include for the provision, handling charges, taking the delivery, safe storage, wiring (including internal wiring) assembling and erecting of all lighting fittings shown on the drawings.

All fittings and pendants shall be fixed to the conduit boxes with brass R/H screws. These to be in line with metal finish of fittings. The lighting fittings are detailed for the purpose of establishing a high standard of finish and under no circumstances will substitute fittings be permitted.

In case of rectangular shaped ceiling fittings, the extreme ends of the fittings shall be secured to suitable support in addition to the central conduit box fittings. Supports shall be provided and fixed by the Sub-Contractor.

The whole of the metal work of each lighting fittings shall be effectively bonded to earth. In the case of ball and/or knuckle joints short lengths of flexible cable shall be provided, bonded to the metal work on either side of the joints. If the above provisions are not made by the manufacturers -, the Sub-contractor shall include cost of additional work necessary in his tender. See "Flexible Cords" clause for details of internal wiring of lighting fittings. Minimum size of internal wiring shall be 20/0.20mm (23/0067). Each lighting fitting shall be provided with number type and size of lamps as detailed on the drawings. It is to be noted that some fittings are suspended as shown on the drawings.

Where two or more points are shown adjacent to each other on the drawings, e.g socket outlet and telephone outlet, they shall be lined up vertically or horizontally on the centre lines of the units concerned.

Normally, the units shall be lined up on vertical centre lines, but where it is necessary to mount units at low level they shall be lined up horizontally.

2.36 POSITIONS OF POINTS AND SWITCHES

Although the approximate positions of all points are shown on the drawings, enquiry shall be made as to the exact positions of all M.C.B panels, lighting points, socket outlets etc, before work is actually commenced. The Sub-contractor must approach the Architect with regard to the final layout of all lights on the ceiling and walls.

The Sub-contractor must consult with the Engineer in liaison with the Clerk of Works, or the General Foreman on site regarding the positions of all points before fixing any conduit etc. The Sub-Contractor shall be responsible for all alterations made necessary by the non-compliance with the clause.

2.37 STREET/SECURITY OUTDOOR LIGHTING COLUMNS:

The column shall be at a minimum of 225mm in the ground on 75mm thick concrete foundations and the pole upto 150mm shall be surrounded with concrete. The top bracket and plain section of the columns shall be common to and interchangeable with all brackets with maximum mismatching tolerance of 3mm between any pole and bracket. After manufacture and before erection the columns shall be treated with an approved mordant solution which shall be washed off and the whole allowed to dry. Thereafter, the columns shall be painted with one undercoat and two coats of gloss paint to an approved colour. All columns shall be complete with fused cutouts.

2.38 TIMING CONTROL SWITCH

These shall be installed where shown on the drawings. Photocell timing control circuits which will operate 'on' with a specified level of darkness and 'off' with a given level of light. The initial adjustment will be done with approval of the Electrical Engineer.

2.39 WIRING SYSTEM FOR STREETLIGHTING

Cables shall be as indicated on the drawings, and shall be laid in a cable trench 450mm deep along the road sides and 600mm deep across the roads and 900mm away from the road kerb or 1500mm away from the edges of the road. 'Loop-in' and 'Loop-out' arrangement shall be used at every pole. Wiring to the lanterns on each pole shall be with 1.5mm² PVC twin insulated and sheathed cable with earth wire shall be laid at least 600mm below the finished road level on a compact bed of murram at least 50mm thick and covered with a concrete surrounded 150mm thick.

2.40 METAL CONTROL PILLAR

These shall be metal clad and fabricated as per contract drawings and specification. The Sub-Contractor shall supply, install, test and commission control pillars including supplying, fixing connecting switchgears as detailed on the appropriate drawings.

2.41 CURRENT OPERATED EARTH LEAKAGE CIRCUIT BREAKER

Current operated earth leakage circuit breaker shall conform to B.S.S. 4293:68 rated at 240 volts D.P. 50 cycles A.C. Mains.

The breaker shall be provided with test switch and fitted in weather proof enclosure for surface mounting. The rated load current and earth fault operating current shall be as specified in the drawings. These shall be as manufactured by Crabtree, Siemens or other equal and approved.

2.42 M.V. SWITCHBOARD AND SWITCHGEAR

The switchboard shall be manufactured in accordance with KS04-226 which coordinates the requirements for electrical power switchgear and associated apparatus.

It is not intended that this K.S. should cover the requirements for specified apparatus for which separate Kenyan Standard exist. All equipment and material used in the switchboard shall be in accordance with the appropriate Kenya Standard.

The switchboard shall comprise the equipment shown on the drawings together with all current transformers, auxiliary fuses, labels, small wiring and interconnections necessary for the satisfactory operation of the switchboard

Switchboard shall be of the flush fronted, enclosed, metal clad type with full front or rear access as called for in the particular specifications, suitable for indoor use, sectionalized as necessary to facilitate transport and erection. The maximum height of the switchboard is to be approximately 2.0 meters. A suitable connection chamber containing all field terminals shall be provided at the top or bottom of the switchboard as appropriate.

Before manufacture, the Sub-Contractor shall submit to the consulting Engineer for approval of detailed drawings showing the layout, construction and connection of the switchboard.

All bus-bars and bus-bar connections shall consist of high conductivity copper and be provided in accordance with KS 04-226: 1985. The bus-bars shall be clearly marked with the appropriate phase and neutral colours which should be red, yellow, blue for the phases and black for neutral. The bus-bars shall be so arranged in the switchboard that the extensions to the left and right may be made in the future with ease should the need arise.

Small wiring, which will be neatly arranged and cleated, shall be executed in accordance with B.S. 158 and the insulation of the wiring shall be colored according to the phase or neutral connection.

Switches and fuse switches, shall be in strict accordance with KS04-183:1978 Class 2 switches. Means of locking the switch in the "OFF" position shall be provided.

All fuse switches shall comply with KS04-183:1978, PARTS 2 and 3 a fault rating at least equal to the fault rating of the switchboard in which they are installed. Cartridge fuse links to KS 04-183:1978 category A.C. 46, class Q1 and fusing factor not exceeding 1.5 shall be supplied with each fused switch.

Mounting arrangements shall be such that individual complete fuse switches may be disconnected and withdrawn when necessary without extensive dismantling work. When switches are arranged in their formation all necessary horizontal and vertical barriers shall be provided to ensure segregation from adjacent units. Means of locking the switch in the "OFF" position shall be provided.

2.43 STEEL CONDUITS AND STEEL TRUNKING

Conduits shall be of heavy gauge class "B" welded to Standard specification KS 04-180:1985. In no case will conduit smaller than 20mm diameter be used on the works. Conduits installed within buildings shall be black enameled finish except where specified otherwise. Where installed externally or in damp conditions they shall be galvanised. Conduit fittings, accessories or equipment used in conjunction with galvanised conduits shall also be galvanised or otherwise as approved by the service engineer.

Metal trunking shall be fabricated from mild steel of not less than 18 swg. All sections of trunking shall be rigidly fixed together and attached to the framework or fabric or the building at intervals of not less than 1.2m.

Joint trunking shall not overhang fixing points by more than 0.5m.

All trunking shall be made electrically continuous by means of 25×3 mm copper links across each joint and where the trunking is galvanised, the links shall be made by galvanised flat iron strips.

All trunking fittings (i.e. bends, tees, etc) shall leave the main through completely clear of obstructions and continuously open except through walls and floors at which points suitable fire resisting barriers shall be provided as may be necessary. The inner edge of bends and tees shall be chamfered where cables larger than 35mm² are employed.

Where trunking passes through ceilings and walls the cover shall be solidly fixed to 150mm either side of ceilings and floors and 50mm either side of walls.

Screws and bolts securing covers to trunking or sections of covers together shall be arranged so that damage to cables cannot occur either when fixing covers or when installing cables in the trough.

Where trunking is used to connect switchgear of fuseboards, such connections shall be made by trunking fittings manufactured for this purpose and not by multiple conduit couplings.

Where vertical sections of trunking are used which exceed 4.5m in length, staggered tie off points shall be provided at 4.5m intervals to support the weight of cables.

Unless otherwise stated, all trunking systems shall be painted as for conduit. Where a wiring system incorporates galvanized conduit and trunking, the trunking shall be deemed to be galvanized unless specified otherwise.

The number of cables to be installed in trunking shall be such as to permit easy drawing in without damage to the cables, and shall in no circumstances be such that a space factor of 45% is exceeded.

Conduit and trunking shall be mechanically and electrically continuous. Conduit shall be tightly screwed between the various lengths so that they butt at the socketed

joints. The internal edges of conduit and all fittings shall be smooth, free from burrs and other defects. Oil and any other insulating substance shall be removed from the screw threads; where conduits terminate in fuse-gear, distribution boards, adaptable boxes, non-spouted switchboxes, etc., they shall, unless otherwise stated, be connected thereto by means of smooth bore male brass bushes, compression washers and sockets. All exposed threads and abrasions shall be painted using an oil paint for black enamelled tubing and galvanising paint for galvanised tubing immediately after the conduits are erected. All bends and sets shall be made cold without altering the section of the conduit. The inner radius of the bed shall not be less than four (4) times the outside diameter of the conduit. Not more than two right angle bends will be permitted without the inter-position of a draw-in-box. Where straight runs of conduit are installed, draw-in-boxes shall be provided at distances not exceeding 15mm. No tees, elbows, sleeves, either of inspection or solid type, will be permitted.

Conduit shall be swabbed out prior to drawing in cables, and they shall be laid so as to drain of all condensed moisture without injury to end connections.

Conduits and trunking shall be run at least 150mm clear of hot water and steam pipes, and at least 75mm clear of cold water and other services unless otherwise approved by the services engineer.

All boxes shall conform to KS 04 – 668: 1986, to be of malleable iron, and black enamelled or galvanised according to the type of conduit specified. All accessory boxes shall have threaded brass inserts.

Box lids where required shall be heavy gauge metal, secured by means of zinc plated or cadmium plated steel screws.

All adaptable boxes and lids of the same size shall be interchangeable.

Boxes used on surface work are to be tapped or drilled to line up with the conduit fixed in distance type saddles allowing clearance between the conduit and wall without the need for setting the conduit.

Where used in conjunction with mineral insulated copper sheathed cable, galvanised boxes shall be used and painted after erection.

Draw-in boxes in the floors are generally to be avoided but where they are essential they must be grouped in positions approved by the services engineer and covered and by the suitable floor traps, with non-ferrous trays and covers.

The floor trap covers are to be recessed and filled in with a material to match the floor surface.

The Sub-contractor must take full responsibility for the filling in of all covers, but the filling in material will be supplied and the filling carried out by the main building contractor.

Where buried in the ground outside the building the whole of the buried conduit is to be painted with two coats of approved bitumastic composition before covering up.

Where run on the surface, unpainted fittings and joints shall be painted with two coats of oil bound enamel applied to rust and grease free metalwork.

2.44 MECHANICAL WINCH

3200lbs Hand winch crank Gear-heavy duty appropriately mounted and with wire rope of not less than 8mm diameter stainless steel

The rope termination in the winch shall be such that distortion or twisting is eliminated and at **least 5 to 6 turns of rope remains on the** drum even when the lantern is fully lowered and rested on the resting pads.

2.45 HEAD FRAME

Pulley shall be of appropriate diameter, large enough to accommodate the stainless steel wire ropes. The pulley block shall be made of **non-corrosive material**, like diecast Aluminum Allow(LM-6). Self-lubricating bearings and stainless steel shaft shall be provided to facilitate smooth and maintenance free operation for a long period. The pulley assembly shall be fully protected by canopy galvanized internally and externally. Close fitting guides and sleeves shall be provided to ensure that the ropes and cables do not dislodge from their respective position in the grooves.

2.46 STAINLESS STEEL WIRE ROPES

Diameter of not less than 8mm and shall essentially be without any intermediate joint either bolted or else between winch and lantern carriage and shall consist of only **non-corrosive stainless steel of ASI 316 or better grade**.

2.47 TESTING ON SITE

The Sub-contractor shall conduct during and at the completion of the installation and, if required, again at the expiration of the maintenance period, tests in accordance with the relevant section of the current edition of the Regulations for the electrical equipment of buildings issued by the I.E.E of Great Britain, the Government Electrical Specification and the Electric Supply Company's By-Laws.

- (a) Tests shall be carried out to prove that all single pole switches are installed in the 'live' conductor.
- (b) Tests shall be carried out to prove that all socket outlets and switched socket outlets are connected to the 'live' conductor in the terminal marked as such, and that each earth pin is effectively bonded to the earth continuity system. Tests shall be carried out to verify the continuity of all conductors of each 'ring' circuit.

- (c) Phase tests shall be carried out on completion of the installation to ensure that correct phase sequence is maintained throughout the installation. Triplicate copies of the results of the above tests shall be provided within 14 days of the witnessed tests and the Sub-contractor will be required to issue to the service engineer the requisite certificate upon completion as required by the regulations referred to above.
- (d) Any faults, defects or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation made apparently by such inspections or tests shall be rectified by the Sub-contractor at his own expense.
- (e) The Sub-contractor shall provide accurate instruments and apparatus and all labour required to carry out the above tests. The instruments and apparatus shall be made available to the services engineer to enable him to carry out such tests as he may require.

The Sub-contractor shall generally attend on other contractors employed on the project and carry out such electrical tests as may be necessary.

The Sub-contractor shall test to the services engineer's approval and as specified elsewhere in this specification or in standards and regulations already referred to, all equipment, plant and apparatus forming part of the works and before connecting to any power or other supply and setting to work.

Where such equipment, etc., forms part of or is connected to a system whether primarily or of an electrical nature or otherwise (e.g. air conditioning system) the Sub-contractor shall attend on and assist in balancing, regulating testing and commissioning, or if primarily an electrical or other system forming part of works, shall balance, regulate, test and commission the system to the service engineer's approval.

SECTION X – BILLS OF QUANTITIES

NOTES FOR BILLS OF QUANTITIES

- 1. The Bills of Quantities form part of the contract documents and are to be read in conjunction with the contract drawings and general specifications of materials and works.
- 2. The prices quoted shall be deemed to include for all obligations under the contract including but not limited to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning and all taxes (including **16% V.A.T and 3 % Withholding tax**).

In accordance with Government policy, the 3% withholding Tax **shall be deducted** from all payments made to the tenderer, and the same shall be forwarded to the **Kenya Revenue Authority (KRA).**

- All prices omitted from any item, section or part of the Bills of Quantities shall be deemed to have been included to another item, section or part.
- 4. The brief description of the items given in the Bills of Quantities are for the purpose of establishing a standard to which the sub-contractor shall adhere to. Otherwise alternative brands of **equal** and **approved** quality will be accepted.

Should the contractor install any material not specified here in before receiving **approva**l from the Project Manager, the contractor shall remove the material in question and **at his own cost**, install the proper material.

- 5. The grand total of prices in the price summary page must be carried forward to the **Form of Tender**.
- 6. Tenderers must enclose, together with their submitted tenders, **detailed manufacturer's brochure**s detailing Technical Literature and specifications on the following fittings they intend to offer.
 - a) Consumers units
 - b) Contactors
 - c) MCBs
 - d) Floodlights
 - e) Photocell
 - f) Pilot Lamp

This shall be used in the tender evaluation to determine the first line aesthetics, quality, performance, maintenance and cost-in -use of fittings offered.

Proposed Installation of 20m. High Mast Flood Light in Kabiroini Market-Ngariama Ward, Karia Market- Ngariama Ward, Kianjogu Market-Inoi Ward, Mugwandi Town Inoi-ward,Umbui Village Kanyekiini Ward

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, install, testing &commissioning of the following complete as specified. All cables shall be copper and shall be complete with cable glands, lugs and necessary termination kits.				
	BILL NO 1.FLOODLIGHT MAST				
1.01	20M galvanized steel gauge 4mm Top and 5mm Bottom. Mast to be fabricated from multiple sections of approximately 10M. Thus, a 20M shall be delivered in two sections and no site welding or bolted joints shall be done on the mast. The minimum overlapping distance shall be 1-5 times the diameter of penetration. For the environmental protection of the mast, the entire fabricated mast shall be hot dip galvanized, internally and externally. The thickness of the galvanizing shall be a minimum of 85 microns.	1	No		
1.02	Luminaire carriage assembly for mounting 6No. 400Watts floodlight fittings.	1	No		
1.03	Enclosed black techno polymer floodlight with polycarbonate visor/photocell, Integral control gear and asymmetrical reflector for 400W HITDE/LED lamp (white illumination). Sealed to IP65 as THORN SONPAK 7 or equal and approved.	б	No		
1.04	Wiring from lighting fitting to the cut-out fuses in 6.0 sqmm copper PVC 4-Core Flex.The lighting fittings must be wired in three separate circuits of two Luminaires each.	25	Lm		
1.05	40A HRC fuse, fuse holder and neutral block and all other necessary accessories	1	No		
1.06	Standard manually operated portable mechanical winch for lowering and raising the light carriage as described in technical specifications.	1	No		
1.07	Foundation works as described and to Engineer's details provided and all to approval.	1	Item		
1.08	16.0mm2 4 core CU/XLPE/S.W.A /PVC underground cable from meter cubicle to the Mast.	50	Item		
	Sub-total carried forward Next page				

Karia Market- Ngariama Ward, Kianjogu Market-Inoi Ward, Mugwandi Town Inoi-ward, Umbui Village Kanyekiini Ward 1.09 Standard weather proof 16SWG No galvanized steel size 280x480x600mm complete with an hinged lockable door and a suitable rain water protection canopy; mounted on concrete base (m.s)1.10 Install the following in the control a) 100A 4-way consumers unit as 1 No approved For item a) above:-(i) 10A MCB 3 No ii) Blanking plate 1 No b) 240V, 32A double-pole contactor as 1 No Telemecanique or approved equivalent c) 63A DP Switch complete with 2. Nο enclosure as SAPPHIRE or equal and approved. 1.11 20A photocell as Thorn QPK or No approved equivalent mounted on a 4 meters high, (above ground) 75mm diameter steel shaft as will be directed. 1.12 Standard size Pilot lamp mounted on 1 No bracket atop luminaire carriage assembly as Thorn series. 600mm long pure copper air 1.13 1 No termination with spikes mounted atop the mast as Furse 1.14 2.5mm T/E E.A PVC CU Cable for 15 No Photo cell wiring **EARTHING** 1.15 Earth inspection concrete chamber No 1 300x300x300mm with air tight inspection cover to approval. 1.16 16mm nominal diameter by 1500mm No threaded copper earth rod as Furse P NO310 driven to ground. 1.17 6.0mm2 single core earth lead copper 2 No cable c/w appropriate cable lugs. Total carried forward to Summary

Proposed Installation of 20m. High Mast Flood Light in Kabiroini Market-Ngariama Ward,

Karia	TZ				
Villag	ge Kanyekiini Ward BILL No, 2 PROJECT MANAGER'S STATIONERY				
	Tenderers shall price for the following stationery requirements. These shall then be delivered, upon their first demand to the Office of the PM immediately after the award to the successful tenderer.				
2.00	Supply the following items to the Project Manager-:				
	HP Laserjet print cartridges				
	i) 53A	1	No		
	ii) 5A	1	No		
2.01	Printing paper, size A4, 80g/cm3, white, 500 sheets.	2	No		
	Sub-total carried forward to the summary page				
Karia	osed Installation of 20m. High Mast Flood Light in K Market- Ngariama Ward, Kianjogu Market-Inoi Ward			_	•
Karia	osed Installation of 20m. High Mast Flood Light in K Market- Ngariama Ward, Kianjogu Market-Inoi Ward ge Kanyekiini Ward			_	•
Karia	osed Installation of 20m. High Mast Flood Light in K Market- Ngariama Ward, Kianjogu Market-Inoi Ward			_	•
Karia	osed Installation of 20m. High Mast Flood Light in K Market- Ngariama Ward, Kianjogu Market-Inoi Ward ge Kanyekiini Ward			_	•
Karia Villag	osed Installation of 20m. High Mast Flood Light in K Market- Ngariama Ward, Kianjogu Market-Inoi Ward ge Kanyekiini Ward SUMMARY PAGE			own Inoi-w	•
Karia Villag	osed Installation of 20m. High Mast Flood Light in K Market- Ngariama Ward, Kianjogu Market-Inoi Ward Se Kanyekiini Ward SUMMARY PAGE Total for Bill No.1 Floodlight Mast Total for Bill No.2 Project Manager's			own Inoi-w	•
Karia Villag 1.00 2.00	psed Installation of 20m. High Mast Flood Light in K. Market- Ngariama Ward, Kianjogu Market-Inoi Ward E Kanyekiini Ward SUMMARY PAGE Total for Bill No.1 Floodlight Mast Total for Bill No.2 Project Manager's Stationery Provisional sum for Electrical power		gwandi T	own Inoi-w	ard,Umbui - -
1.00 2.00	psed Installation of 20m. High Mast Flood Light in K. Market- Ngariama Ward, Kianjogu Market-Inoi Ward E Kanyekiini Ward SUMMARY PAGE Total for Bill No.1 Floodlight Mast Total for Bill No.2 Project Manager's Stationery Provisional sum for Electrical power supply		Sum	own Inoi-w	- - 50,000
1.00 2.00 3.00 4.00	psed Installation of 20m. High Mast Flood Light in K. Market- Ngariama Ward, Kianjogu Market-Inoi Ward Kanyekiini Ward SUMMARY PAGE Total for Bill No.1 Floodlight Mast Total for Bill No.2 Project Manager's Stationery Provisional sum for Electrical power supply Provisional sum for Project Management		Sum Sum	own Inoi-w	- - 50,000 30,000
1.00 2.00 3.00	Desed Installation of 20m. High Mast Flood Light in K. Market- Ngariama Ward, Kianjogu Market-Inoi Ward Ge Kanyekiini Ward SUMMARY PAGE Total for Bill No.1 Floodlight Mast Total for Bill No.2 Project Manager's Stationery Provisional sum for Electrical power supply Provisional sum for Project Management		Sum Sum	own Inoi-w	- - 50,000 30,000
1.00 2.00 3.00	Desed Installation of 20m. High Mast Flood Light in K. Market- Ngariama Ward, Kianjogu Market-Inoi Ward Ge Kanyekiini Ward SUMMARY PAGE Total for Bill No.1 Floodlight Mast Total for Bill No.2 Project Manager's Stationery Provisional sum for Electrical power supply Provisional sum for Project Management Provisional sum for Contingencies		Sum Sum	own Inoi-w	- - 50,000 30,000

Amount in
words
Name and address of Registered Electrical
Contractor
Signature
VAT NO
Email address
Name and Address of Witness
SignatureDate

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, install, testing & commissioning of the following complete as specified. All cables shall be copper and shall be complete with cable glands, lugs and necessary termination kits.				
	BILL NO 1. FLOOD LIGHT MAST				
1.01	20M galvanized steel gauge 4mm Top and 5mm Bottom. Mast to be fabricated from multiple sections of approximately 10M. Thus, a 20M shall be delivered in two sections and no site welding or bolted joints shall be done on the mast. The minimum overlapping distance shall be 1-5 times the diameter of penetration. For the environmental protection of the mast, the entire fabricated mast shall be hot dip galvanized, internally and externally. The thickness of the galvanizing shall be a minimum of 85 microns.	1	No		
1.02	Luminaire carriage assembly for mounting 6No. 400Watts floodlight fittings.	1	No		
1.03	Enclosed black techno polymer floodlight with polycarbonate visor/photocell, Integral control gear and asymmetrical reflector for 400W HITDE/LED lamp (white illumination). Sealed to IP65 as THORN SONPAK 7 or equal and approved.	6	No		
1.04	Wiring from lighting fitting to the cut-out fuses in 6.0 sqmm copper PVC 4-Core Flex.The lighting fittings must be wired in three separate circuits of two Luminaires each.	25	Lm		
1.05	40A HRC fuse, fuse holder and neutral block and all other necessary accessories	1	No		
1.06	Standard manually operated portable mechanical winch for lowering and raising the light carriage as described in technical specifications.	1	No		
1.07	Foundation works as described and to Engineer's details provided and all to approval.	1	Item		
1.08	16.0mm2 4 core CU/XLPE/S.W.A /PVC underground cable from meter cubicle to the Mast.	50	Item		

PROPOSED INSTALLATION OF 20M. HIGH MAST FLOOD LIGHT IN KIARAGANA TOWN-AND NDIRITI MUKURE WARD

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.09	Standard weather proof 16SWG galvanized steel size 280x480x600mm complete with an hinged lockable door and a suitable rain water protection canopy; mounted on concrete base (m.s)	1	No		
1.10	Install the following in the control pillar:-				
	a) 100A 4-way consumers unit as approved	1	No		
	For item a) above:-				
	(i) 10A MCB	3	No		
	ii) Blanking plate	1	No		
	b) 240V, 32A double-pole contactor as Telemecanique or approved equivalent	1	No		
	c) 63A DP Switch complete with enclosure as SAPPHIRE or equal and approved.	2	No		
1.11	20A photocell as Thorn QPK or approved equivalent mounted on a 4 meters high,(above ground) 75mm diameter steel shaft as will be directed.	1	No		
1.12	Standard size Pilot lamp mounted on bracket atop luminaire carriage assembly as Thorn series.	1	No		
1.13	600mm long pure copper air termination with spikes mounted atop the mast as Furse	1	No		
1.14	2.5mm T/E E.A PVC CU Cable for Photo cell wiring	15	No		
	EARTHING				
1.15	Earth inspection concrete chamber 300x300x300mm with air tight inspection cover to approval.	1	No		
1.16	16mm nominal diameter by 1500mm threaded copper earth rod as Furse P NO310 driven to ground.	1	No		
1.17	6.0mm2 single core earth lead copper cable c/w appropriate cable lugs.	2	No		
	Total carried forward to Summary	•	-	•	

PROPOSED INSTALLATION OF 20M. HIGH MAST FLOOD LIGHT IN KIARAGANA TOWN-AND NDIRITI MUKURE WARD ITEM DESCRIPTION **QTY** UNIT RATE AMOUNT BILL No, 2 PROJECT MANAGER'S **STATIONERY** Tenderers shall price for the following stationery requirements. These shall then be delivered, upon their first demand to the Office of the PM immediately after the award to the successful tenderer. 2.00 Supply the following items to the Project Manager-: HP Laserjet print cartridges i) 53A 2 No ii) 5A 2 No

5

2

No

No

Printing paper, size A4, 80g/cm3, white,

Sub-total carried forward to the summary page

High Quality Safety Boots Size 6&7

500 sheets.

2.01

2.02

Proposed Installation of 20m. High Mast Flood Light in Kiaragana Town- and Ndiriti Mukure Ward								
ITEM	CRIPTION	QTY	UNIT	RATE	AMOUNT			
	SUMMARY PAGE							
1.00	Total for Bill No.1 Floodlight Mast			Kshs				
2.00	Total for Bill No.2 Project Manager's Stationery			Kshs				
3.00	Provisional sum for Electrical power supply		Sum		50,000			
4.00	Provisional sum for Project Management		Sum		50,000			
5.00	Provisional sum for Contingencies		Sum		50,000			
	Sub Total 1							
	ADD: 3% MONITORING AND EV	/ALUATI	ON					
	GRAND TOTAL CARRIED TO FO	ORM OF	TENDER					
NB: pric	es quoted to be inclusive of all go	vernme	nt taxes					
Amount	in							
words								
		••••••	•••••	• • • • • • • • • • • • • • • • • • • •	••••••			
Name an	d address of Registered Electrical							
Contract	or	•••••	•••••					
		•••••		•••••				

	SignatureDateTel No
	VAT NO
	Email address
	Name and Address of Witness
I	Signature Date

GRAND SUMMARY

Bill No.	Description of Work	UNIT	QTY	RATE	AMOUNT
Bill No. 1	Proposed Installation of 20m. High Mast Flood Light in Kabiroini Market-Ngariama Ward, Karia Market- Ngariama Ward, Kianjogu Market-Inoi Ward, Mugwandi Town Inoi-ward, Umbui Village Kanyekiini Ward	No.	5		
Bill No. 2	Proposed Installation of 20m. High Mast Flood Light in Kiaragana Town- and Ndiriti Mukure Ward	No.	2		
	GRAND TOTAL CARRIED FROM LOT 1 AND LOT 2				