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SECTION I INVITATION TO TENDER

TENDER No. KeNHA/R4/242/2024 – CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD

The Kenya National Highways Authority (KeNHA) is a State Corporation established under the Kenya Roads Act, 2007, with the responsibility for the management, development, rehabilitation and maintenance of national roads.

The Authority invites bids from eligible construction companies registered with the National Construction Authority (NCA) in Category NCA 1 or 2 for the CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD to be funded through Government of Kenya Road Maintenance Levy Fund.

SCOPE OF WORK

The scope of works shall be as described in the tender document.

QUALIFICATION FOR TENDERING

Mandatory Requirements

The following **<u>MUST</u>** be submitted together with the bid;

- 1. Copy of Certificate of incorporation
- 2. Copy of <u>Valid</u> Annual Practising Licence with the National Construction Authority in the classes specified above
- 3. Copy of **Valid** Tax Compliance Certificate
- 4. Copy of recent CR 12 form (Issued within the last Six 6 months from the Tender Opening Date).
- 5. Bidders shall sequentially serialise all pages of each tender submitted. A Guide Note on Serialization is outlined in the Notes below
- 6. A copy of PBC Certificate for at least one of the Directors.

Other Requirements

As specified in the respective tender documents covering the following: -

- 1. Similar previous experience where applicable.
- 2. Professional and Technical Personnel.
- 3. Current work load.
- 4. Eligibility
 - a. To enhance equity, bidders shall bid for a maximum of Two (2) Tenders, but can only be Awarded a Maximum of One (1) Tenders, under this Tender Notice. Bidders who participate in more than Two (2) tenders shall be disqualified.
 - b. Director (s) bidding under different companies for the same tender shall be disqualified
 - c. Director (s) bidding under different companies should not participate in more than
 Two (2) tenders
 - d. Only those bidders registered in the Category as indicated in the tender document shall bid for the respective tenders

- e. Bidders to comply with Section 157 of the Public Procurement and Asset Disposal Act, 2015 (PPADA, 2015) on participation of candidates in preference and reservations.
- f. Any form of Canvassing will lead to disqualification
- 5. Source of indices and base values

Notes:

- 1. All submitted Documents may be verified from the issuing agencies, KeNHA Reserves the right to verify all submitted documents.
- 2. The bidders to ensure that their rates in the bills of quantities are within the known prevailing market rates for road works pursuant to Section 70(6) (b) of PPADA, 2015 read together with Regulation 43(4) of the Public Procurement and Asset Disposal Regulations, 2020.

Procurement shall be based on the post qualification method and the above details will be submitted with the priced bid.

There shall be **a mandatory pre-tender site visits** as specified in the detailed tender notice above and as uploaded onto the KeNHA website.

NOTE:

Every Bidder shall be represented by one Technical Person with a Minimum qualification of a Diploma in Civil/Highway Engineering. The Individual SHALL bring along the following in hard copies:

- 1. Original ID/Passport and a <u>CERTIFIED</u> Copy
- 2. <u>CERTIFIED</u> copy of Diploma/H. Dip./Degree Certificate
- **3.** <u>CERTIFIED</u> Copy of Registration Certificate and proof of current subscription by Engineers Board of Kenya (EBK)/ Kenya Engineering Technology Registration Board (KETRB)/ Institute of Engineering Technologists and Technicians (IET)
- 4. Original Introductory letter bearing the Company letterhead and an Official Stamp authorizing them to represent them in the specific pre-tender site visit/Pre-Tender Conference. The letter shall be duly signed. Photocopies or any other media shall not be accepted.
 - The copies of ID/Passport, Academic Certificates, Professional Registration Certificate, proof of current subscription **SHALL** be certified by commissioner of oaths or Notaries public
 - All the above documents shall be retained by the Procuring Entity's and may be verified later for authenticity.

One (1) person shall only represent one (1) company per Tender.

The detailed tender notice is available in the KeNHA website and Public Procurement Information Portal (PPIP). Clarifications and Questions may be sent to <u>procurement@kenha.co.ke</u> as indicated in the Tender Notice.

NOTE:

KeNHA/R5/242/2024

- **1.** Every bidder shall make their own arrangements to familiarize themselves with the site conditions and the Road and its features.
- 2. <u>Clarity on Serialization of Tender Documents by Prospective Bidders</u>

Please note that all pages of the tender documents submitted by bidders shall be sequentially serialized numerically that is; 1, 2, 3, 4, 5...etc. That is, serialization shall be undertaken by the bidder, by doing fresh numbering on its documents. The pagination of the tender documents as downloaded from the KeNHA website should not be used as a means of Serialization. The bidder's serialization should follow the same logical sequence from the first page to the end.

Interested eligible candidates may obtain further information and inspect tender documents from the **Procurement Office, Kenya National Highways Authority, -Nairobi Regional Office, Ministry of Works Offices, Machakos Road** as indicated in the Tender Notice during normal working hours.

A complete set of tender documents may be obtained by interested tenderers from the Kenya National Highways Authority website: <u>www.kenha.co.ke</u> or PPIP portal: <u>www.tenders.go.ke</u> free of charge. Bidders are encouraged to download tender documents to minimise physical visits to the respective **KeNHA Regional Offices.**

Completed tender documents are to be enclosed in plain sealed envelope clearly marked with tender name, reference number and submitted to: -

Office of the Regional Director – Nairobi Region, Kenya National Highways Authority, P.O. Box 200-00507, NAIROBI, KENYA

Or Deposited in the Tender Box at the reception area, **KeNHA Nairobi Region**, **Ministry of Works Offices**, **Machakos Road** so as to be received on or before **the Date and Time as indicated in the Tender Notice**.

All interested bidders are required to continually check the Kenya National Highways Authority website: <u>www.kenha.co.ke</u> for any tender addendums or clarifications that may arise before submission date.

Tenders will be opened immediately thereafter in the presence of Tenderers/Representatives who wish to attend at the KeNHA Nairobi Regional Office Board Room.

Deputy Director, Supply Chain Management For: DIRECTOR GENERAL

PART 1 TENDERING PROCEDURES

SECTION II - INSTRUCTIONS TO TENDERERS

A. GENERAL PROVISIONS

1. Scope of Tender

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

2. Fraud and Corruption

- 2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.
- 2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding <u>collusive practices</u> in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.
- 2.3 Tenderers shall permit and shall cause their agents (where declared or not), subcontractors, sub-consultants, service providers, suppliers, and their personnel, to permit the Procuring Entity to inspect all accounts, records and other documents relating to any initial selection process, pre-qualification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Procuring Entity.
- 2.4 Unfair Competitive Advantage -Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.

3. Eligible Tenderers

- 3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.8, or an individual or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender. The maximum number of JV members shall be specified in the **TDS**.
- 3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.

- 3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:
 - a) Directly or indirectly controls, is controlled by or is under common control with another tenderer; or
 - b) Receives or has received any direct or indirect subsidy from another tenderer; or
 - c) Has the same legal representative as another tenderer; or
 - d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process; or
 - e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods or works that are the subject of the tender; or
 - f) any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as a consultant for Contract implementation; or
 - g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document; or
 - h) Has a close business or personal relationship with senior management or professional staff of the Procuring Entity who has the ability to influence the bidding process and:
 - i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or
 - May be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.
- 3.4 A tenderer shall not be involved incorrupt, coercive, obstructive or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified.
- 3.5 A Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative tenders. This includes participation as a subcontractor in other Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender.
- 3.6 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT3.9. A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates inconformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.
- 3.7 A Tenderer that has been debarred from participating in public procurement shall be ineligible to tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.
- 3.8 A Tenderer that is a state-owned enterprise or a public institution in Kenya may be eligible to tender and be awarded a Contract(s) only if it is determined by the Procuring Entity to meet the following conditions, i.e. if it is:
 - i) A legal public entity of Government and/or public administration,

- ii) financially autonomous and not receiving any significant subsidies or budget support from any public entity or Government, and
- iii) Operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.
- 3.9 Firms and individuals shall be ineligible if their countries of origin are:
 - a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country, or
 - b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.

A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

- 3.10 Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, local subcontracts and labour) from citizen suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity determine if this condition is met shall be provided for this purpose in "SECTION III-EVALUATION AND QUALIFICATION CRITERIA, Item 9".
- 3.11 Pursuant to the eligibility requirements of ITT4.10, a tender is considered a foreign tenderer, if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has <u>less than 51 percent</u> ownership by Kenyan citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.
- 3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website <u>www.nca.go.ke</u>.
- 3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Website www.cak.go.ke.
- 4.14 A Kenyan tenderer shall be eligible to tender if it provides evidence of having fulfilled his/her tax obligations by producing a valid tax compliance or valid tax certificate issued by the Kenya Revenue Authority.

4. Eligible Goods, Equipment, and Services

4.1 Goods, equipment and services to be supplied under the Contract may have their origin in

any country that is not ineligible under ITT3.9. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of Goods, equipment and services.

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

5. Tenderer's Responsibilities

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

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

6. Sections of Tender Document

6.1 The tender document consists of Parts 1, 2, and 3, which includes all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITT10.

PART 1: Tendering Procedures

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

PART 2: Works' Requirements

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

PART3: Conditions of Contract and Contract Forms Section VIII: General Conditions (GCC) Section IX: Particular Conditions of Contract Section X: Contract Forms

- 6.2 The Invitation to Tender Notice issued by the Procuring Entity is not part of the Contract documents.
- 6.3 Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of a pre-arranged site visit and those of the pre-Tender meeting (if any), or Addenda

to the Tender document in accordance with ITT 10. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

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

7. Clarification of Tender Document, Site Visit, Pre-Tender Meeting

- 7.1 Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the Procuring Entity's address **specified in the TDS** or raise its enquiries during the pre-Tender meeting if provided for in accordance with ITT 7.2. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received no later than the period specified in the **TDS p**rior to the deadline for submission of tenders. The Procuring Entity shall forward copies of its response to all tenderers who have acquired the Tender D documents in accordance with ITT 7.4, including a description of the inquiry but without identifying its source. If so specified in the **TDS**, the Procuring Entity shall also promptly publish its response at the web page identified in the **TDS**. Should the clarification result in changes to the essential elements of the Tender Documents, the Procuring Entity shall amend the Tender Documents following the procedure under ITT 8 and ITT 22.2.
- 7.2 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the site(s) of the required contracts and obtain all information that may be necessary for preparing a tender. The costs of visiting the Site shall be at the Tenderer's own expense. The Procuring Entity shall specify in the **TDS** if a pre- arranged Site visit and or a pre-tender meeting will be held, when and where. The Tenderer's designated representative is invited to attend a pre-arranged site visit and a pre-tender meeting, as the case may be. The purpose of the site visit and the pre-tender meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.3 The Tenderer is requested to submit any questions in writing, to reach the Procuring Entity not later than the period specified in the **TDS** before the meeting.
- 7.4 Minutes of a pre-arranged site visit and those of the pre-tender meeting, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired the Tender Documents. Minutes shall not identify the source of the questions asked.
- 7.5 The Procuring Entity shall also promptly publish anonymized (*no names*) Minutes of the pre-arranged site visit and those of the pre-tender meeting at the web page identified **in the TDS**. Any modification to the Tender Documents that may become necessary as a result of the pre-arranged site visit and those of the pre-tender meeting shall be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to ITT 8 and not through the minutes of the pre-Tender meeting. Non-attendance at the pre-arranged site visit and the pre-tender meeting will not be a cause for disqualification of a Tenderer.

8. Amendment of Tender Documents

- 8.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tender Documents by issuing addenda.
- 8.2 Any addendum issued shall be part of the Tender Documents and shall be communicated in writing to all who have obtained the Tender Documents from the Procuring Entity. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's website in accordance with ITT 7.5.

8.3 To give Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity should extend the deadline for the submission of Tenders, pursuant to ITT 22.2.

C. PREPARATION OF TENDERS

9. Cost of Tendering

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

10. Language of Tender

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

11. Documents Comprising the Tender

11.1 The Tender shall comprise the following:

- a) Form of Tender prepared in accordance with ITT 12;
- b) Schedules including priced Bill of Quantities, completed in accordance with ITT 12 and ITT 14;
- c) Tender Security or Tender-Securing Declaration, in accordance with ITT 19.1;
- d) Alternative Tender, if permissible, in accordance with ITT 13;
- e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 20.3;
- f) Qualifications: documentary evidence in accordance with ITT 17 establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted;
- g) Conformity: a technical proposal in accordance with ITT 16;
- h) Any other document required in the TDS.
- 11.2 In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender, together with a copy of the proposed JV Agreement. Change of membership and conditions of the JV prior to contract signature will render the tender liable for disqualification.

12. Form of Tender and Schedules

- 12.1 The Form of Tender and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITT 20.3. All blank spaces shall be filled in with the information requested. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
- 12.2 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.
- **13.** Alternative Tenders

- 13.1 Unless otherwise specified in the TDS, alternative Tenders shall not be considered.
- 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the **TDS**, and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.
- 13.3 Except as provided under ITT13.4 below, Tenderers wishing to offer technical alternatives to the requirements of the Tender Documents must first price the Procuring Entity's design as described in the Tender Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the <u>Winning Tender</u> conforming to the basic technical requirements shall be considered by the Procuring Entity.
- 13.4 When specified in the **TDS**, Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in the **TDS**, as will the method for their evaluating, and described in Section VII, Works' Requirements.

14. Tender Prices and Discounts

- 14.1 The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Bill of Quantities shall conform to the requirements specified below.
- 14.2 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Tenderer shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Procuring Entity. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.
- 14.3 The price to be quoted in the Form of Tender, in accordance with ITT 12, shall be the total price of the Tender, including any discounts offered.
- 14.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 12
- 14.5 It will be specified in the **TDS** if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, excepting cases where the contract is subject to fluctuations and adjustments, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.
- 14.6 Where tenders are being invited for individual lots (contracts) or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 14.4, provided the Tenders for all lots (contracts) are opened at the same time.
- 14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

15. Currencies of Tender and Payment

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

16. Documents Comprising the Technical Proposal

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

17. Documents Establishing the Eligibility and Qualifications of the Tenderer

- 17.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.
- 17.2 In accordance with Section IV, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section V, Tender Forms.
- 17.3 If a margin of preference applies as specified in accordance with ITT33. 1, national tenderers, individually or in joint ventures, applying for eligibility for national preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.
- 17.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, <u>a particular contract or group of contractors qualifies</u> for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or possibility of collusion between tenderers, and there by help to prevent any corrupt influence in relation to the procurement management.
- 175 The purpose of the information described **in ITT 17.2** above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its

ownership and control.

- 17.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 6.4. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.
- 17.7 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.
- 17.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.
- 17.9 If information submitted by a tenderer pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:
 - i) If the procurement process is still on going, the tenderer will be disqualified from the procurement process,
 - ii) If the contract has been awarded to that tenderer, the contract award will be set aside,
 - iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.
- 17.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 17.8 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tender.

18. Period of Validity of Tenders

- **18.1.** Tenders shall remain valid for the Tender Validity period specified in the **TDS**. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 22). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 19, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting their quest shall not be required or permitted to modify its Tender.

19. Tender Security

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

Declaration shall use the form included in Section IV, Tender Forms.

- 19.2 If a Tender Security is specified pursuant to ITT19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:
 - i) a bank guarantee;
 - ii) a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya, from a reputable source, and an eligible country.
- 19.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 18.2.
- 19.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.
- 195 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the TDS. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined non-responsive or a bidder declines to extend tender validity period.
- 19.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the TDS.
- 19.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:
 - a) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereto provided by the Tenderer; or
 - b) if the successful Tenderer fails to:
 - i) sign the Contract in accordance with ITT 47; or
 - ii) furnish a Performance Security and if required in the TDS, and any other documents required in the TDS.
- 19.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.
- 19.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.
- 19.10 A tenderer shall not issue a tender security to guarantee itself.

20. Format and Signing of Tender

20.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 11 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 13, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number **specified in the TDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

- 202 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 20.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the **TDS** and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialled by the person signing the Tender.
- 20.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 20.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the Tender.

D. SUBMISSION AND OPENING OF TENDERS

21. Sealing and Marking of Tenders

- 21.1 The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:
 - a) in an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as describedinITT11; and
 - b) in an envelope or package or container marked "COPIES" all required copies of the Tender; and
 - c) if alternative Tenders are permitted in accordance with ITT 13, and if relevant:
 - i) in an envelope or package or container marked "ORIGINAL ALTERNATIVE TENDER", the alternative Tender; and
 - ii) in the envelope or package or container marked "COPIES-ALTERNATIVE TENDER", all required copies of the alternative Tender.

The inner envelopes or packages or containers shall:

- a) Bear the name and address of the Procuring Entity.
- b) Bear the name and address of the Tenderer; and
- c) Bear the name and Reference number of the Tender.
- 21.2 If an envelope or package or container is not sealed and marked as required, the *Procuring Entity* will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that were misplaced or opened prematurely will not be accepted.

22. Deadline for Submission of Tenders

- 22.1 Tenders must be received by the Procuring Entity at the address specified in the **TDS** and no later than the date and time also specified in the **TDS**. When so specified in the **TDS**, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the **TDS**.
- 22.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the Tender Documents in accordance with ITT 8, in which case all

rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Tenders

The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of tenders, in accordance with ITT 22. Any Tender received by the Procuring Entity after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

24. Withdrawal, Substitution, and Modification of Tenders

- 24.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:
 - a) prepared and submitted in accordance with ITT 20 and ITT 21 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
 - b) received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 22.
- 24.2 Tenders requested to be withdrawn in accordance with ITT 24.1 shall be returned unopened to the Tenderers.
- 24.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

25. Tender Opening

- 25.1 Except in the cases specified in ITT 23 and ITT 24.2, the Procuring Entity shall publicly open and read out all Tenders received by the deadline, at the date, time and place specified **in the TDS**, in the presence of Tenderers' designated representatives and anyone who chooses to attend. Any specific electronic Tender opening procedures required if electronic Tendering is permitted in accordance with ITT 22.1, shall be as specified in the **TDS**.
- 252 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelopes with the corresponding Tender shall not be opened but returned to the Tenderer. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out attender opening.
- 25.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.
- 25.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender No. Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.
- 255 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if

applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as the Procuring Entity may consider appropriate.

- 25.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bill of Quantities (to be decided on by the tender opening committee) are to be initialled by the members of the tender opening committee attending the opening.
- 25.7 At the Tender Opening, the Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 23.1).
- 25.8 The Procuring Entity shall prepare minutes of the Tender Opening that shall include, as a minimum:
 - a) The name of the Tenderer and whether there is a withdrawal, substitution, or modification;
 - b) The Tender Price, per lot (contract) if applicable, including any discounts;
 - c) any alternative Tenders;
 - d) the presence or absence of a Tender Security, if one was required.
 - e) number of pages of each tender document submitted.
- 25.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of tender opening register shall be issued to a tenderer upon request.

E. Evaluation and Comparison of Tenders

26. Confidentiality

- 26.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 43.
- 26.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.
- 26.3 Notwithstanding ITT 26.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact the Procuring Entity on any matter related to the tendering process, it shall do so in writing.

27. Clarification of Tenders

- 27.1 To assist in the examination, evaluation, and comparison of the tenders, and qualification of the tenderers, the Procuring Entity may, at its discretion, ask any tenderer for a clarification of its tender, given a reasonable time for a response. Any clarification submitted by a tenderer that is not in response to a request by the Procuring Entity shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation of the tenders, in accordance with ITT 31.
- 27.2 If a tenderer does not provide clarifications of its tender by the date and time set in the Procuring Entity's request for clarification, its Tender may be rejected.

28. Deviations, Reservations, and Omissions

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

29. Determination of Responsiveness

- 29.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the tender itself, as defined in ITT 11.
- 29.2 A substantially responsive Tender is one that meets the requirements of the Tender document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that, if accepted, would:
 - a) Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
 - b) limit in any substantial way, inconsistent with the tender document, the Procuring Entity's rights or the tenderer's obligations under the proposed contract; or
 - c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.
- 29.3 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 16, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
- 29.4 If a tender is not substantially responsive to the requirements of the tender document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30. Non-material Non-conformities

- 30.1 Provided that a tender is substantially responsive, the Procuring Entity may waive any nonconformities in the tender.
- 30.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial non- conformities in the tender related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.
- 30.3 Provided that a tender is substantially responsive, the Procuring Entity shall rectify quantifiable nonmaterial non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified **in the TDS**.

31. Arithmetical Errors

- 31.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in anyway by any person or entity.
- 31.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle

errors on the following basis:

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

32. Conversion to Single Currency

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

33. Margin of Preference and Reservations

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

34. Nominated Subcontractors

- 34.1 **Unless** otherwise stated **in the TDS**, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected/nominated by the Procuring Entity. In case the Procuring Entity nominates a subcontractor, the subcontract agreement shall be signed by the Subcontractor and the Procuring Entity. The main contract shall specify the working arrangements between the main contractor and the nominated subcontractor.
- 34.2 Tenderers may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified **in the TDS**. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.
- 34.3 Domestic subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated so by the Procuring Entity **in the TDS** as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Tenderer may be added to the qualifications of the Tenderer.

35. Evaluation of Tenders

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- 35.1 The Procuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Procuring Entity shall determine the Lowest Evaluated Tender in accordance with ITT 40.
- 35.2 To evaluate a Tender, the Procuring Entity shall consider the following:
 - a) Price adjustment in accordance with ITT 31.1(iii); excluding provisional sums and contingencies, if any, but including Day work items, where priced competitively;
 - b) Price adjustment due to discounts offered in accordance with ITT 14.4;
 - c) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 32;
 - d) price adjustment due to quantifiable non-material non-conformities in accordance with ITT 30.3; and
 - e) any additional evaluation factors specified **in the TDS** and Section III, Evaluation and Qualification Criteria.
- 35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in tender evaluation.

36. Comparison of Tenders

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

37. Abnormally Low Tenders and

Abnormally High Tenders Abnormally Low

Tenders

- 37.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.
- 37.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.
- 37.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

Abnormally High Tenders

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

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

- i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity <u>may accept or not accept</u> the tender depending on the Procuring Entity's budget considerations.
- ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.
- 37.6 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (*often due to collusion, corruption or other manipulations*), the Procuring Entity shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

38. Unbalanced and/or Front-Loaded Tenders

- 38.1 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or front loaded, the Procuring Entity may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the tender prices with the scope of works, proposed methodology, schedule and any other requirements of the Tender document.
- 38.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:
 - a) accept the Tender; or
 - b) require that the total amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding a 10% of the Contract Price; or
 - c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works; or
 - d) reject the Tender,

39. Qualifications of the Tenderer

- 39.1 The Procuring Entity shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 39.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 17. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.
- 39.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.

40. Lowest Evaluated Tender

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

- a) Most responsive to the Tender document; and
- b) The lowest evaluated price.

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

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

F. AWARD OF CONTRACT

42. Award Criteria

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

43. Notice of Intention to enter into a Contract

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

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

44. Stand still Period

- 42.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.
- 422 Where a Standstill Period applies, it shall commence when the Procuring Entity has transmitted to each Tenderer the Notification of Intention to Enter into a Contract with the successful Tenderer.

45. Debriefing by the Procuring Entity

- 45.1 On receipt of the Procuring Entity's <u>Notification of Intention to Enter into a Contract</u> referred to in ITT 43, an unsuccessful tenderer may make a concern(s) regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.
- 45.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

46. Letter of Award

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

47. Signing of Contract

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

48. Performance Security

- 48.1 Within twenty-one (21) days of the receipt of the Letter of Award from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the **TDS**, in accordance with the General Conditions of Contract, subject to ITT 38.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to the Procuring Entity. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent bank is not required.
- 48.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the **TDS** or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.
- 48.3 Performance security shall not be required for contract estimated to cost less than the amount specified in the Regulations.

49. Publication of Procurement Contract

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

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

50. Procurement Related Complaint

The procedures for making Procurement-related Complaints shall be specified in the TDS.

SECTION III - TENDER DATA SHEET (TDS)

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

A. Gener	al					
ITT 2.1	The name of the contract is: CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD					
	The Reference number of the Contract is: KeNHA/R5/242/2024					
ITT2.3	The information made available to competing firms is as follows: NONE					
ITT2.4	The firms that provided consultancy services for the contract being tendered for are: NONE					
ITT3.1	NO Joint Ventures (JV) shall be allowed					
В.						
ITT 7.1	i) The Tenderer will submit any request for clarification in writing at the Address:					
	Provided in the detailed Tender Notice					
	To reach the Procuring Entity not later than seven (7) days prior to the deadline of bid submission.					
	ii) The Procuring Entity will publish the response at the Website www.kenha.co.ke					
ITT 7.2	 A) A MANDATORY Pre-tender site visit shall take place as indicated in the long tender notice at the proposed footbridge site at Kihunguro on Thika Superhighway (S1). 					
ITT 7.3	The Tenderer will submit any questions in writing, to reach the Procuring Entity not later than 7 days to the submission date. The Procuring Entity will publish its response at the website www.kenha.co.ke					
C Proport	ation of Tenders					
C. 1 1 cpai a						
ITP 11.1 (h)	The Tenderer shall submit the following additional documents in its Tender: As <i>indicated in the Long Tender Notice</i>					
ITT 13.1	Alternative Tenders shall not be considered.					
ITT 13.2	Alternative times for completion shall not be permitted.					
ITT 13.4	Alternative technical solutions shall not be permitted for any parts of the Works.					
ITT 14.5	The prices quoted by the Tenderer shall be: Subject to adjustment					
ITT 15.2	Foreign currency requirements not allowed.					
ITT 18.1	The Tender validity period shall be 140 days from the specified date of opening as indicated in the invitation to Tender					
ITT 18.2	a) The Number of days beyond the expiry of the initial tender validity period will be					

	60 dava					
	60 days.					
	The Tender price shall be adjusted by the following percentages of the tender price:					
	(i) By 0 % of the local currency portion of the Contract price adjusted to reflect local inflation during the period of extension, and					
	(<i>ii</i>) By 0 % the foreign currency portion of the Contract price adjusted to reflect the international inflation during the period of extension.					
ITT 19.1	Tender Security of the amount specified in the Appendix to form of Bid <i>shall be</i> required.					
	KSh. 750,000					
ITT 19.2 (IV)	The other security is Not Applicable					
ITT 19.5	Other documents required are as specified in Form No. 3; Contract Agreement					
	NOT APPLICABLE					
	In addition to the original of the Tender, the number of copies is: ONE ORIGINAL BID DOCUMENT(HARDCOPY)					
ITT 20.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: <u>Certificate of Independent Tender Determination Part B of Form of Tender</u>					
D. Submis	ssion and Opening of Tenders					
ITT 21.3	A tender package or container that cannot fit in the tender box shall be received as follows: shall be received at the Supply Chain Management Offices of the location					
	specified in the tender notice.					
ITT 22.1	The Tender opening shall take place at the time and the address for Opening of Tenders provided below:					
	Office of the Regional Director Board Room. – Nairobi Region, Kenya National Highways Authority, P.O. Box 200-00507, NAIROBI, KENYA Date and time of tender opening as indicated in long tender notice.					
ITT 25.1	Tenders shall not be submitted electronically.					
ITT 25.6	The number of representatives of the Procuring Entity to sign is at least four					
	ion, and Comparison of Tenders					
	The adjustment shall be based on the average price of the item or component as quoted in other substantially responsive Tenders. If the price of the item or component cannot be derived from the price of other substantially responsive Tenders, the Procuring Entity shall use its Lowest estimate.					
ITT 31.2	The error shall be considered a major deviation that leads to disqualification of the tender if the percentage of the error (error over the tender price quoted) is: $\pm 0.1\%$					
ITT 32.1	The currency that shall be used for Tender evaluation and comparison purposes to convert at the selling exchange rate all Tender prices expressed in various currencies into a single currency is-: Kenya Shillings					
ITT 33.2	A margin of preference <i>shall</i> apply as provided in PPAD Act 2015 and Regulations					

	2020				
ITT 33.4	The invitation to tender is extended to all groups and does not qualify for reservations.				
ITT 34.1	At this time, the Procuring Entity does not intend to execute certain specific parts of the Works by subcontractors selected in advance.				
ITT 34.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: 40% <i>of the total contract amount</i> . Tenderers planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity (ies) or parts of the Works to be subcontracted along with complete details of the subcontractors and their qualification and experience.				
ITT 35.2 (d)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.				
ITT 48.2	Additional requirements are: As detailed in the Qualification Criteria/Form				
ITT 49.1	The procedures for making a Procurement-related Complaint are available from the PPRA website <u>info@ppra.go.ke</u> or <u>complaints @ppra.go.ke</u> . If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to:				
	For the attention: <i>Director General</i>				
	Procuring Entity: Kenya National Highways Authority (KeNHA)				
	Email address: <i>dg@kenha.co.ke</i>				
	In summary, a Procurement-related Complaint may challenge any of the following:				
	(i) the terms of the Tender Documents; and(ii) the Procuring Entity's decision to award the contract.				

SECTION IV- EVALUATION AND QUALIFICATION CRITERIA

General Provisions

1 General Provisions

- 1.1 This section contains the criteria that the Employer shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms. The Procuring Entity shall use <u>the Standard</u> <u>Tender Evaluation Document for Goods and Works</u> for evaluating Tenders.
- 12 Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the Kenya Shilling equivalent using the rate of exchange determined as follows:
 - a) For construction turnover or financial data required for each year Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
 - b) Value of single contract Exchange rate prevailing on the date of the contract signature.
 - c) Exchange rates shall be taken from the publicly available source identified in the ITT 14.3. Any error in determining the exchange rates in the Tender may be corrected by the Procuring Entity.
- 13 Evaluation and contract award Criteria

The Procuring Entity shall use the criteria and methodologies listed in this Section to evaluate tenders and arrive at the Lowest Evaluated Tender. The tender that (i) meets the qualification criteria, (ii) has been determined to be substantially responsive to the Tender Documents, and (iii) is determined to have the Lowest Evaluated Tender price shall be selected for award of contract.

2. Preliminary examination for Determination of Responsiveness

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

3. Tender Evaluation (ITT 35)

Price evaluation: In addition to the criteria listed in ITT 35.2 (a) - (d) the following criteria shall apply:

i) Alternative Completion Times, if permitted under ITT 13.2, will be evaluated as follows:

N/A

ii) **Alternative Technical Solutions** for specified parts of the Works, if permitted under ITT 13.4, will be evaluated as follows:

N/A

iii) **Other Criteria; i**f permitted under ITT 35.2(d):

N/A

The Procuring Entity shall consider Tenders offered for alternatives as specified in Part2-Works Requirements. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.

5. Margin of Preference

- 6.1 If the TDS so specifies, the Procuring Entity will grant a margin of preference of fifteen percent (15%) to be loaded one valuated price of the foreign tenderers, where the percentage of shareholding of Kenyan citizens is less than fifty-one percent (51%).
- 6.2 Contractors applying for such preference shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contract or group of contractors qualifies for a margin of preference.
- 6.3 After Tenders have been received and reviewed by the Procuring Entity, responsive Tenders shall be assessed to ascertain their percentage of shareholding of Kenyan citizens. Responsive tenders to shall be classified into the following groups:
 - i) Group A: tenders offered by Kenyan Contractors and other Tenderers where Kenyan citizens hold shares of over fifty one percent (51%).
 - ii) Group B: tenders offered by foreign Contractors and other Tenderers where Kenyan citizens hold shares of less than fifty one percent (51%).
- 6.4 All evaluated tenders in each group shall, as a first evaluation step, be compared to determine the lowest tender, and the lowest evaluated tender in each group shall be further compared with each other. If, as a result of this comparison, a tender from Group A is the lowest, it shall be selected for the award. If a tender from Group B is the lowest, an amount equal to the percentage indicated in Item 3.1 of the respective tender price, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each tender from Group B. All tenders shall then be compared using new prices with added prices to Group Band the lowest evaluated tender from Group A. If the tender from Group A is still the lowest tender, it shall be selected for award. If not, the lowest evaluated tender from Group B based on the first evaluation price shall be selected.

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

- a) In case the tender <u>was subject to post-qualification</u>, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.
- b) In case the tender <u>was not subject to post-qualification</u>, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.
 - i) The Tenderer shall demonstrate that they have access to, or have available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow estimated at a minimum of Kenya Shillings Three hundred (300) Million.
 - Minimum <u>average</u> annual construction turnover of Kenya Shillings Three hundred (300) Million equivalent calculated as total certified payments received for contracts in progress and/or completed within the last three (3) years.
 - iii) At least two (2) contracts of a similar nature executed within Kenya, or the East African Community or abroad, that have been satisfactorily and substantially completed within the last five (5) years as a prime contractor, or joint venture

member or sub-contractor each of minimum value Kenya Shillings Three hundred (300) Million.

iv) Contractor's Key equipment listed on the table "Contractor's Equipment" below: Contractor's Equipment

PLANT AND EQUIPMENT		Max 19
Relevant Equipment	ENTOwned (Max 19 marks) The following equipment will attract marks as indicated below;• 2No.Mobile Mixers (4.5m³ capacity) – 2mks• 2No.Excavators – 2mks • 2No.Excavators – 2mks • 6No.Tippers – 2mks • 2No.Flat Bed Lorries – 1mks • 2No.Wheel Loader – 2mks • 2No.Drum Roller – 2mks	0 - 19
	 1No.Paver – 2mks 1No.Distributor – 2mks 1No. 50T Crane – 2mks 	
	Leased (Max 9 marks) – 1 point for each equipment type leased	0 - 9

v) Other conditions depending on their seriousness.

c) History of non-performing contracts:

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last three (3) years. The required information shall be furnished in the appropriate form.

d) Pending Litigation

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

e) Litigation History

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last three (3) years. All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the year's specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender.

SECTION IV: EVALUATION AND QUALIFICATION CRITERIA CONTD...

This Section contains all the factors, methods and criteria that the Employer shall use to evaluate applications. The information to be provided in relation to each factor and the definitions of the corresponding terms are included in the respective Application Forms.

- 1. Eligibility Requirements
- 2. Historical Contract Non-Performance
- 3. Financial Situation
- 4. Technical/Engineering Works Experience
- 5. Program of Works and Work Methodology
- 6. Key Professional and Technical Site Staff
- 7. Major Plant and Equipment to be used in the Project

QUALIFICATION FORM

Item No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)		
A. PRE	A. PRELIMINARY EVALUATION					
1.	Nationality	Nationality in accordance with ITT 3.6	Forms ELI - 1.1, 1.2 and 1.3, with attachments			
2.	Goods, equipment and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 3.9 & 4.1	Forms ELI - 1.4			
3.	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Form of Tender			
4.	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.7	Form of Tender - Form SD 1			
5.	State- owned Enterprise	Meets conditions of ITT 3.8	Forms ELI - 1.1 and 1.2, with attachments			
6.	Appendix to Form of Bid	Form properly filled & signed	Appendix to Form of Bid in the Prescribed Format			
7.	Suspension Based on Execution of Tender/Proposal Securing Declaration by the Procuring Entity	Not under suspension based on- execution of a Tender/Proposal Securing Declaration pursuant to ITT 3.7.	To be confirmed from Internal records by the procuring entity			
8.	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to Qualification Criteria 6(d) & 6(e) and assuming that all pending litigation will NOT be	Form CON - 1			

Item No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		resolved against the Tenderer.		
9.	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer for the last three (3) years.	Form CON - 1	
10.	History of Non- Performing Contracts	 Non-performance of a contract did not occur as a result of contractor default for the last three (3) years. Non-performance shall be deemed to have occurred by evidence of: Termination Letter 	contract didf contractoree (3) years.l be deemedvidence of:Reference to be made to	
		 Liquidated Damages 	procuring Authority's records	
11.	Declaration of Fair employment laws and practices	Bidders shall declare they are not guilty of any serious violation of fair employment laws and practices and will be bound to abide by the industry CBA at minimum	Form CON - 2	
12.	Declaration of Knowledge of Site /Pre-Bid Conference	Attend Pre-Tender Site Visits as per TDS, ITT 5.2	Form CON - 3	
13.	Tender Security	Tender Security document	Form in the Prescribed Format	
14.	Priced Bill of Quantities	 Fill all rates, and amounts, NO Alterations of the Quantities accepted, All bidders own Corrections must be Countersigned NO Errors noted in the Bills of Quantities 	Bills of Quantity in the Prescribed Format	
15.	Annual Practicing	Proof of registration with the	Copy of Current NCA	

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Item No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
	License with the National Construction Authority	National Construction Authority in Class 1 or 2 as Roads/Bridges Contractor	Practicing License	
16.	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority in accordance with ITT 4.14.	Provide Valid Tax Compliance Certificate	
17.	Serialization of the Bid	Bidders shall sequentially serialize all pages of each tender submitted.Any written Pages or document attached or inserted DocumentsMUST be sequentially serialized.	The Serialization MUST be numerically sequential starting from Numeric 1.	
18.	Completeness of tender document	The person or persons signing the bid shall initial all pages of the bid where entries have been made.	All pages with entries (Typed or hand written) must be initialled. Any alterations made in the tender document must be countersigned.	

Item No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
B. TEC	HNICAL EVALUAT	ION	-	
1.	Financial Capabilities		Form FIN - 3.1, with attachments	
			Attachments include:	
		(i) Bidders shall provide audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last <i>3 years</i> shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability (as demonstrated by Financial Evaluation ratios).	i. Audited accounts All pages must be initialled and stamped by both a practicing Auditor registered with ICPAK and one of the Directors. Auditor's practicing membership number from ICPAK must be indicated and a valid practicing license shall be provided.	(i) 0 – 6 Marks
			The Financial ratio Form to be signed by the Auditor registered with ICPAK and one of the Directors	
			ii. Financial Ratios	
			Computation shall be made for the following Ratios and marks awarded to each of the ratios:	
			-Working Capital	
			- Debt to Equity Ratio	
			- Current ratio	

Item No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met o Not Met)
		The Tenderer shall demonstrate that they have access to, or have available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow estimated at Kenya Shillings Three hundred (300) Million The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that they have adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.	 Operating Cash Flow ratio Line of Credit Working Capital Operating Cash Flow ratio 	(ii) 0 – 5 Marks
		(ii)Bank statements for six (6) months up to date of tender opening.	Etc.	(iii) 0 – 5 Marks
	Average Annual Construction Turnover	(iii)Minimum average annual construction turnover of Kenya Shillings Three hundred (300) Million, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 3 year years, divided by 3 years	Form FIN - 3.2 Attachments include Financial Statements	0 – 8 Marks
2.	Ongoing Works	The total value of outstanding works on the on-going contracts should not exceed	Form FIN - 3.3 Any bidder with more than 2	0 – 4 Marks

Item No.	Subject Qualification Requirement		Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		the average annual turnover for the last three years.	ongoing projects (not completed) loses two marks.	
	General Construction Experience	Experience under construction contracts in the role as a main contractor or subcontractor for at least the last Five [5] years prior to the applications submission deadline. Grading shall be based on general projects handled. Three projects and above earns maximum points and prorated downwards.	Form EXP -4.1 <i>Attach Letters of Award and</i> <i>Completion Certificates</i>	0 – 3 Marks (1 Mark for each General Construction project)
	Specific Construction	Participation as a Road's Contractor, Management Contractor or Subcontractor, in at least two (2) Road/Bridges construction contracts in East Africa Community with a value of at least Kenya Shillings Three hundred (300) Million, successfully and substantially completed within the last 5 years. The similarity shall be based on the following criteria:	Form EXP 4.2(a)&(b) Provide Letters of Award and Completion Certificates and write-up indicating description of works For subcontracted works, the bidder should provide the following;	• 0 – 16 marks
	& Contract Management Experience	 Construction of any pedestrian crossing facility. Construction of a bridge of minimum span length 20m or a 	 Award letter of the main contractor Award letter of the subcontract. 	0-5 marks0-3 marks
		box culvert with minimum width of 15m (one box culvert with multiple cells totalling to a 15m opening)	• Completion letter of the subcontract and write-up indicating description of works	• 0-4marks
			• Subcontract approval from	• 0-4marks

Item No.	Qualification Subject	Qualification Requir	rement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		NB: The above requests represent the upper limit, any activity that is less than the above stated will be marked on a pro rata basis.		the Engineer/supervision Authority	
		Curriculum Vitae (CV Key Staff must be pres provided format and du proposed individual. Copies of certificates a Practicing Licenses (fo Academic Certificates mandatory;	ented in the aly signed by the and Annual or Engineers) and	Schedule F (Form PER. 1 and PER. 2)	16 Marks
		KEY PERSONNEL			Max 18
		Site Agent	Registration	Registered Engineer	4
	Contractoria	(Max 11	Qualification	Degree	3
	Contractor's Representative	marks) *Must be Kenyan	Relevant experience	e 15 years and above	4
3.	and Key	Citizen (0 marks if		7-14years	3
0.	Personnel	requirement not met)		3-6 years	2
				0-3years	1
		Surveyor (Max	Qualification	Degree	2
		(Max 4marks)		HND	1.0
				Diploma	1
			Relevant experience		2
				7-14years	1.0
				3-6 years 0-3years	0.5
		Foreman	Qualification	Degree	1.5
		(Max	Zuunneunon	HND	1.0
		3marks)		Diploma	1

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Item No.	Qualification Subject	Qualification Requi	rement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)	
			Relevant	15 years and above	1.5	
			experience	7-14years	1.5	
				3-6 years	1.0	
				0-3years	1	
		WORK METHODO	LOGY		Max 16	
		Adequacy and	Adequacy and Program of works & cash flow projection			
	Proposed	quality of the	Detailed Methodol	ogy	0 - 5	
4.	4. Methodology and proposed Work plan methodology		Proposed Equipme	0 - 3		
	Work plan	incure coregy	Methodology on sa	fety during the construction period	l. 0 - 2	
			Methodology on E issues.	1 0-3		
5.	Contractors Key equipment	 equipment as pr the Project by p that demonstrate ownership. For Bidders plan shall provide an Agreement in P during the Proje 	ership of various oposed to be used in roviding Logbooks e proof of nning to hire, they	Schedule D of Technical Proposal	19 Marks	

Item Qualific No. Subject		Qualification Requirement		Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met o Not Met)
	I	PLANT AND EQUIPM	IENT		Max 19
	F	Relevant Equipment	The follo indicated 2 21 2 21 2 21 2 21 6 61 2 21 2 21 2 21	No.Mobile Mixers (4.5m ³ capacity) –	

Tenderers who score less than the required pass (75%) will be automatically disqualified. Tenderers who pass the technical evaluation will be evaluated further.

C. FINANCIAL EVALUATION:

The lowest evaluated bidder shall be subjected to Financial Evaluation which includes but not limited to **sensitivity analysis** of the **rates** to detect **abnormally low bids or abnormally high bids or unbalanced tenders or front loaded**.

Treatment of Abnormally Low Bid/Abnormally high Bid/ Unbalanced bid

The Procuring Entity may undertake an analysis of bidders' rates which are potentially lower/higher than the known prevailing market rates.

Item No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
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The bidders shall be required to provide objective justification including supporting documents on derivation of their rates within stipulated time to the Procuring Entity (*See Schedule G, Part I & II on Derivation of Rates*).

In addressing the above criteria, the following steps shall be undertaken by the Procuring Entity.

- **a. Identify:** The Procuring Entity identifies a potential Abnormally Low/High Bid based on comparison with known prevailing market rates or with the project's total cost estimate.
- **b.** Evaluate: The Procuring Entity clarifies with the Bidder/proposer (hereafter the Bidder). The Bidder prepares a justification of their price based on the request from the Procuring Entity. The procuring Entity fully analyses the Bidder's justification to verify if it is an Abnormally Low/High Bid. Due diligence may be carried out by the Procuring Entity on the bidder's documentation.
- **c.** Determination: The Procuring Entity fully documents the decision to accept or reject the Bid and executes appropriate action(s)/recommendation(s).

In view of the above, the procuring Entity shall evaluate and analyse the Bidders' submissions against the known prevailing market rates and cost estimation guidelines. The analysis of the bidder's justification shall take into account all evidence provided in response to the request. Accordingly, the Procuring Entity's relevant committee shall make a recommendation to the Accounting Officer.

D. POST QUALIFICATION: The procuring entity shall verify the documents provided by the bidder with the issuing authority.

*Bidders attaining 75% from the Technical Evaluation will proceed to Financial Evaluation

APPENDIX TO THE QUALIFICATION CRITERIA

ITEM			DESCR	POINT SCALE	SCORE		
	FINA	NCIAL CAP	ACITY			Max 24	
	a A	Audited Statem	ents			0-6	
1	b I	Line of credit				0-5	
		Bank statement ender)	(Last six n	nont	hs to the date of	0-5	
	d T	Furnover				0-8	
	EXPI	ERIENCE				Max 19	
2	0	General Experi	ence			0-3	
	S	Specific experie	ence in rela	ted	works	0-16	
3	(CURRENT CO	OMMITM	ENI	ſS	Max 4	
3	0	On-going work	S			0-4	
	KEY	PERSONNE	Ĺ			Max 18	
	Si	te Agent	Registratio	on	Registered Engineer	4	
	`	Aax 11	Qualificati	ion	Degree	3	
	n	narks)	Relevant		15 years and above	4	
	*	Must be	experience	e	7-14years	3	
		Kenyan			3-6 years	2	
	C n r	Citizen (0 narks if requirement not met)			0-3years	1	
	S	Surveyor	Qualificati	ion	Degree	2	
	`	Max			HND	1.0	
4	4	lmarks)			Diploma	1	
		-	Relevant		15 years and above	2	
			experience	e	7-14years	1.0	
					3-6 years	1	
					0-3years	0.5	
	F	Foreman	Qualificati	ion	Degree	1.5	
		Max			HND	1.0	
	3	3marks)			Diploma	1	
			Relevant		15 years and above	1.5	
			experience	e	7-14years	1.5	
					3-6 years	1.0	
					0-3years	1	
	PLAN	NT AND EQU	IPMENT			Max 19	
5	F	Relevant Equip	T w	he fo vill a ndica ((2	ed (Max 21marks) ollowing equipment ttract marks as ated below; 2No.Mobile Mixers 4.5m ³ capacity) – 2mks 2No.Excavators – 2mks	0 – 19	

ITEM	DESCRIPTION	POINT SCALE	SCORE
	 6No.Tippers – 2mks 2No.Flat Bed Lorries 1mks 2No.Wheel Loader – 2mks 2No.Drum Roller – 2mks 1No.Paver – 2mks 1No.Distributor – 2mks 1No. 50T Crane - 2mks 		
	Leased (Max 9 marks) – 1 point for each equipment type leased	0 - 9	
	WORK METHODOLOGY	Max 16	
	Program of works & cash flow projection	0-3	
	Detailed Methodology	0-5	
ſ	Proposed Equipment Scheduling/Work statement.	0-3	
6	Methodology on safety during the construction period.	0-2	
	Methodology on Environmental and Social Safeguard issues.	0 -3	
	TOTAL	MAX 100	

SECTION V - TENDERING FORMS

- 1. TENDERER'S QUALIFICATION FORMS
 - Form ELI 1.1- Tenderer Information Form
 - Form ELI 1.2- Tenderer JV information
 - Form ELI 1.3- Qualification of Foreign Contractors
 - Form ELI 1.4- Declarations of materials, equipment and labour sources
- 2. FORM OF TENDER
 - A. TENDERER'S ELIGIBILITY CONFIDENTIAL BUSINESS QUESTIONNAIRE B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION
 - C. SELF-DECLARATION FORMS
 - FORM SD1
 - FORM SD2
 - FORM SD3
- 3. APPENDIX TO FORM OF TENDER
- 4. CONTRACTUAL FORMS

5.

- FORM CON 1
- FORM CON 2
- FORM CON 3
- FINANCIAL FORMS
 - **FORM FIN 3.1**
 - FORM FIN 3.2
 - FORM FIN 3.3
- 6. TECHNICAL EXPERIENCE
 - FORM EXP 4.1
 - **FORM EXP 4.2** (A)
 - **FORM EXP 4.2 (B)**
- 7. TECHNICAL PROPOSAL
 - SCHEDULE A. Projected Cash Flow
 - **SCHEDULE B. Site Organizations**
 - **SCHEDULE C. Subcontractors**
 - **SCHEDULE D. Contractor's Equipment**
 - **SCHEDULE E. Initial Tentative Program of Performance**
 - SCHEDULE F. Key Personnel Proposed
 - **SCHEDULE G Derivation of Rates**
- 8. FORM OF TENDER SECURITY DEMAND GUARANTEE
- 9. FORM OF TENDER SECURITY (TENDER BOND)
- 10. FORM OF TENDER-SECURING DECLARATION
- 11. FORM OF DECLARATION OF FAIR EMPLOYMENT LAWS AND PRACTICES
- 12. FORM OF DECLARATION OF CONTRACTS TERMINATED IN THE LAST THREE (3) YEARS

TENDERER'S QUALIFICATION FORMS

FORM ELI-1.1- TENDERER INFORMATION FORM

Form ELI-1.1
Tenderer Information Form
Date:
ITT No. and title:
Page of pages
Tenderer's name:
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration:
[indicate country of Constitution]
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information
Name:
Address:
Telephone/Fax numbers:
E-mail address:
1. Attached are copies of original documents of:
I. <i>Certificate of Incorporation and CR12</i> of the legal entity named above, in accordance with ITT 4.1.
II. Copies of National Identification documents for Directors
□ In case of a JV, Form of intent to form JV or JV agreement, in accordance with ITT 4.1.
□ In case of a state-owned enterprise or institution, in accordance with ITT 4.7. documents establishing:
 Legal and financial autonomy Operation under commercial law Establishing that tenderer is not under the supervision of the Procuring Entity,
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership (<i>Not Applicable</i>).

FORM ELI- 1.2- TENDERER JV INFORMATION

Tenderer's JV Information Form
(to be completed for each member of Tenderer's JV)
Date:
ITT No. and title:
Pageofpages
Tenderer's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information
Name:
Address:
Telephone/Fax numbers:
E-mail address:
1. Attached are copies of original documents of:
i. Certificate of Incorporation and CR 12 of the legal entity named above, including Registered JV agreement (Registration of Documents Act), in accordance with ITT 4.1.
ii. Copies of National Identification documents for all Directors

□ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 4.7.

2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership (*Not Applicable*).

FORM ELI - 1.3- QUALIFICATION OF FOREIGN CONTRACTORS

Qualification of Foreign Tenderers

Pursuant to ITT 4.10, a foreign tenderer must complete this form to demonstrate that the tender fulfils this condition (the 40% Rule).

ITEM	Description of Work Item	Describe location of source	COST in K. shillings	Comments, if any
А	Local Labour		1	
1				
2				
3				
4				
5 B	Sub contracts from Local course			
В	Sub contracts from Local source			
1				
2				
3				
4				
5				
С	Local materials			
1				
1				
2				
3				
4				
5				
5 D	Use of Local Plant and Equipme	ent		
1				
2				
3				
4				
5 E	Add any other items			
С.	Add any other items			
1				

2			
3			
4			
5			
6			
7			
	TOTAL COST LOCAL CONTEN	T	
	PERCENTAGE OF CONTRACT	PRICE	

FORM ELI - 1.4- DECLARATIONS OF MATERIALS, EQUIPMENT AND LABOUR SOURCES

Pursuant to ITT 5.1, tenderers must complete this form to demonstrate that the tender fulfils this condition

ITEM	Description of Work Item	Describe location of	Comments, if any
Α	Materials	source	
A			
1			
2			
3			
4			
5			
6			
В	Equipment		
1			
2			
3			
4			
5			
Ċ	Labour		
1			
2			
3			
4			
5			
67			
	TOTAL COST LOCAL CONT PERCENTAGE OF CONTRAC		
	LICENTROL OF CONTRAC		

SCHEDULE OF ADJUSTMENT DATA

In this table, the bidder shall fill in column E by specifying a value within the ranges provided in column F, ensuring that the total weight equals 1.00.

The Source of Index is the Kenya National Bureau of Statistics (KNBS), Base Year for indices is 2019.

Column A	Column B	Column C	Column D	Column E	Column F					
Index Code*	Index Description*	Source of Index*	Base Value and D ate*	Bidder's Weighting	Weighting Range					
Fixed	Nonadjustable	KNBS 2019 Civil Engineering Cost Indices	Cost	Cost date		A= 0.20				
EQ	Equipment		gineering		B=0.1-0.3					
LL	Labour		2019 Civil Eng Indices	2019 Civil En Indices	2019 Civil En Indices	2019 Civil En Indices	28 days before tender opening date		C= 0.09 - 0.18	
МТ	Materials						3 2019 6	3 2019 6	; 2019 (2019 6
TF	Transport & Fuel		28 da		E= 0.01 - 0.09					
		•	Total	1.0						

BASIC PRICES FOR MATERIALS AND LABOUR

Notes:

• The Base year for the indices shall be 2019.

Signature:

Date:

(Failure to sign this schedule will Imply the bidder does not accept the above conditions and hence be disqualified from this tender.)

Note:

Indices prevailing at <u>28days</u> before the tender submission deadline shall apply.

FORM OF TENDER

INSTRUCTIONS TO TENDERERS

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

FORM OF TENDER

Date of this Tender submission: As indicated in the Tender Notice

Invitation to Tender No.: KeNHA/R5/242/2024 Alternative No.: [Not

Applicable]

To:

We, the undersigned, declare that:

- a) *No reservations:* We have examined and have no reservations to the tendering document, including Addenda issued in accordance with Instructions to Tenderers (ITT) ;
- b) *Eligibility:* We meet the eligibility requirements and have no conflict of interest in accordance with ITT4;
- c) *Tender-Securing Declaration:* We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing Declaration or Proposal-Securing Declaration in Kenya in accordance with ITT 4.8.
- d) *Conformity:* We offer to execute in conformity with the tendering document and in accordance with the construction or service schedule the following Works: **CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD TENDER No.: KeNHA/R5/242/2024**
- e) *Tender Price:* The total price of our Tender is [name of currency] (*amount in figures and words*).

- f) *Combined Price:* We hereby confirm that our combined price for Rehabilitation Works and Improvement Works does not exceed the threshold given in the TDS ITT 37.5, which is [insert percentage of the total contract price].
- g) *Tender Validity Period*: Our Tender shall be valid for a period specified in TDS 18.1 (or as amended if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (or as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- h) *Performance Security:* If our Tender is accepted, we commit to obtain a Performance Security in accordance with the tendering document;
- i) *One Tender per Tenderer:* We are not submitting any other Tender (s) as an individual Tenderer, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT 4.4, other than alternative Tenders submitted in accordance with ITT 13;

- a) *Suspension and Debarment:* We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Procuring Entity. Further, we are not ineligible under Kenya laws or official regulations or pursuant to a decision of the United Nations Security Council;
- b) *State-owned enterprise or institution:* [select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITT 4.7];
- c) *Commissions, gratuities and fees:* We have paid, or will pay the following commissions, gratuities, or fees with respect to the Tendering process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].

Name of Recipient	Address	Reason	Amount

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

- d) *Binding Contract:* We understand that this Tender, together with your written acceptance thereof included in your Form of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- e) *Not Bound to Accept:* We understand that you are not bound to accept the lowest evaluated cost Tender, the Best Evaluated Tender or any other Tender that you may receive;
- f) *Fraud and Corruption:* We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;
 - g) *Collusive practices:* We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.
- r) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from www.ppra.go.ke during the procurement process and the execution of any resulting contract.
- s) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:
 - a) Tenderer's Eligibility; Confidential Business Questionnaire to establish we are not in any conflict to interest.
 - b) Certificate of Independent Tender Determination to declare that we completed the tender without colluding with other tenderers.
 - a) Self-Declaration of the Tenderer to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
 - b) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal.
- t) Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in "Appendix 1- Fraud and Corruption" attached to

the Form of Tender.
Name of the Tenderer:
Name of the person duly authorized to sign the Tender on behalf of the Tenderer:
Title of the person signing the Tender:
Signature of the person named above:
Date signed day of Year
Name in the capacity
of
Signed
Duly authorized to sign the Tender for and on behalf of
Dated onday of,

A. TENDERER'S ELIGIBILITY - CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

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

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

a) Tenderer's details

General and Specific Details

Sole Proprietor, provide the following details Name		
full	Age	
Nationality	Country	
Origin		
	Citizenship	

c) Partnership, provide the following details.

	Name of Partners	Nationality	Citizenship	%Shares Owned
1				
2				
3				

- (d) Registered Company, provide the following details.
 - i) Private or public Company
 - ii) State the nominal and issued capital of the Company-

Nominal Kenya Shillings

(Equivalent).....

Issued Kenya Shillings

(Equivalent).....

iii) Give details of Directors as follows.

	Name of Directors	Nationality	Citizenship	%Shares Owned
1				
2				
3				

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

If yes, provide details as follows.

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

ii) Conflict of interest disclosure

	Type of Conflict	Disclosure YES or NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Tender has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring		

	Type of Conflict	Disclosure YES or NO	If YES provide details of the relationship with Tenderer
	Entity regarding this tendering process		
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender Document.		
7	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract.		
8	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who would be involved in the implementation or supervision of the Contract.		
9	Has the conflict stemming from such relationship stated in item 7 and 8 above been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.		

f) Certification

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

Full Name_____

Title or Designation_____

(Signature)

(Date)

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying Letter of Tender to the KENYA NATIONAL HIGHWAYS AUTHORITY for: CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD, TENDER No.: KeNHA/R5/242/2024 in response to the request for tenders made by: KENYA NATIONAL HIGHWAYS AUTHORITY do hereby make the following statements that I certify to be true and complete in every respect:

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

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

Name

Title

Date

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

C. SELF-DECLARATION FORMS

FORM SD 1: SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT 2015

I,	

of Post Office Box.....being a resident of.....

in the Republic of.....do hereby make a statement as follows: -

1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of

- 2. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.
- 3. THAT what is deponed to herein above is true to the best of my knowledge, information and belief.

(Date)

Bidder Official Stamp

FORM SD 2: SELF DECLARATION THAT THE TENDERER WILL NOT ENGAGE IN ANY CORRUPT OR FRAUDULENT PRACTICE

I,

of Post Office Box.....being a resident of.....

in the Republic of.....do hereby make a statement as follows: -

4. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of

- 1. 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 **Kenya National Highways Authority** which is the procuring entity.
- 2 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 **Kenya National Highways Authority.**
- 3. THAT the aforesaid Bidder will not engage/has not engaged in any corrosive practice with other bidders participating in the subject tender
- 4. THAT what is deponed to herein above is true to the best of my knowledge information and belief.

(Title)	 (Date)

Bidder's Official Stamp

FORM SD 3: DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I,
on behalf
declare that I have read and fully understood the contents of the Public Procurement & Asset Disposal Act, 2015, Regulations and the Code of Ethics for persons participating in Public Procurement and Asset Disposal and my responsibilities under the Code.
I do hereby commit to abide by the provisions of the Code of Ethics for persons participating in Public Procurement and Asset Disposal.
Name of Authorized
signatory
Sign
Position
Office Telephone
addressTelephone
E-
mail
Name of the
Firm/Company
Date
(Company Seal/ Rubber Stamp where applicable)
Witness
Name
Sign
Date

APPENDIX 1-FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

1. Purpose

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

2. Requirements

- 1.2 The Government of Kenya requires that all parties including Procuring Entities, Tenderers, (applicants/proposers), Consultants, Contractors and Suppliers; any Subcontractors, Sub-consultants, Service providers or Suppliers; any Agents (whether declared or not); and any of their Personnel, involved and engaged in procurement under Kenya's Laws and Regulation, observe the highest standard of ethics during the procurement process, selection and contract execution of all contracts, and refrain from Fraud and Corruption and fully comply with Kenya's laws and Regulations as per paragraphs 1.1 above.
- 1.3 Kenya's public procurement and asset disposal act (*no. 33 of 2015*) under Section 66 describes rules to be followed and actions to be taken in dealing with Corrupt, Coercive, Obstructive, Collusive or Fraudulent practices, and Conflicts of Interest in procurement including consequences for offences committed. A few of the provisions noted below highlight Kenya's policy of no tolerance for such practices and behaviour:
 - a person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding;
 - 2) A person referred to under subsection (1) who contravenes the provisions of that subsection commits an offence;
 - 3) Without limiting the generality of the subsection (1) and (2), the person shall be
 - a) disqualified from entering into a contract for a procurement or asset disposal proceeding; or
 - b) if a contract has already been entered into with the person, the contract shall be voidable;
 - 4) The voiding of a contract by the procuring entity under subsection (7) does not limit any legal remedy the procuring entity may have;
 - 5) An employee or agent of the procuring entity or a member of the Board or committee of the procuring entity who has a conflict of interest with respect to a procurement
 - a) shall not take part in the procurement proceedings;
 - b) shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and
 - c) shall not be a subcontractor for the bidder to whom was awarded contract, or a member of the group of bidders to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.

- 6) An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to the procuring entity;
- 7) If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5) (a) and the contract is awarded to the person or his relative or to another person in whom one of them had a direct or indirect pecuniary interest, the contract shall be terminated and all costs incurred by the public entity shall be made good by the awarding officer. Etc.
- 14 In compliance with Kenya's laws, regulations and policies mentioned above, the Procuring Entity:
 - i) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows: "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v) "obstructive practice" is:
 - deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.
 - b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:

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

- c) Rejects a proposal for award¹ of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority(ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations;

- e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub- consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect² all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and
- f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a "Self-Declaration Form" as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

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

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

APPENDIX TO FORM OF TENDER

Conditions	Sub-Clause	Data
Bid Security (Bank Guarantee only)		KSh 750,000
Employer's name and address	1.1.2.2	Director General, Kenya National Highways Authority, P.O. Box 49712 – 00100, <u>NAIROBI</u>
Engineer's name and address	1.1.2.4	Director – Highway Design and Safety Kenya National Highways Authority, P.O. Box 49712 – 00100, <u>NAIROBI</u>
Time for Completion	1.1.3.3	Eighteen (18) Months
Defects Notification Period	1.1.3.7	Twelve (12) Months
Site	1.1.6.7	Kihunguro along the Thika Superhighway (S1) Road
Communications	1.3(b)	The Employer's address is: The Director General, Kenya National Highways Authority (KeNHA), P.O. Box 49712 - 00100 NAIROBI. The Engineer's address is: The Director, Highway Design and Safety Kenya National Highways Authority (KeNHA), P.O. Box 49712 - 00100 NAIROBI. The Contractor address is: Name P.O. Box City/Town Email: Telephone

Conditions	Sub-Clause	Data
Governing Law	1.4	Laws of the Republic of Kenya
Ruling and communications language	1.4	English
Contract Agreement	1.6	Within the Bid Validity Period
Assignment	1.7	Not applicable
Care and Supply of documents	1.8	One (1) Contract document to be supplied to the Contractor
Right of access to the Site	2.1	Within Twenty Eight (28) days of the Notice of Commencement Date
Performance Security	4.2	The Performance Security shall be in the form of an unconditional Bank Guarantee in the amount(s) of 5% of the Accepted Contract Amount and in the same currency (ies) of the Accepted Contract Amount.
Subcontractors	4.4	40%
Parts of the Works for which subcontracting is not permitted	4.4	N/A
Progress reports	4.21	Softcopies and One (1) Hard copy
Normal working hours	6.5	Weekdays: 8am – 5pm (With 1 hour break) Saturdays: 8am – 12 Noon
Commencement of Works	8.1	Fourteen (14) days after Order to Commence
Programme	8.3	SoftcopyOne (1) Hard copyWithin 28days
Delay damages payable for each day of delay	8.7	0.05% of the Accepted Contract Amount
Maximum amount of delay damages	8.7	5% of the Accepted Contract Amount
Take Over of Parts of the Works	10.2	Not applicable
Provisional Sums	13.5 (b)(ii)	As specified in the Schedule of rates
Advance payment	14.2	Not Applicable
Application for interim payment certificates (Statements)	14.3	1 hard copy and 1 soft copy

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Conditions	Sub-Clause	Data
Percentage of retention	14.3(c)	5% of the Accepted Contract Amount
Limit of Retention Money	14.3(c)	5% of the Accepted Contract Amount
Schedule of payments	14.4	Not applicable
Period of payment of Advance Payment to the Contractor	14.7(a)	Not Applicable
Period for the Employer to make interim payments to the Contractor	14.7b	Ninety (90) days
Period for the Employer to make final payment to the Contractor	14.7(c)	Ninety (90) days
Delayed payment	14.8	Simple interest at a rate equal to two percentage points above the mean Base Lending Rate obtained from the Central Bank of Kenya
Number of additional paper copies of draft Final Statement	14.11	1 hard copy and 1Soft copy
Currencies of Payment	14.15	Kenya Shillings (KES)
Maximum total liability of the Contractor to the Employer	17.6	The accepted contract amount
Periods for submission of insurance	18.1	 a. evidence of insurance – 14days b. relevant policies – 28 days
Maximum amount of deductibles for insurance of the Employer's risks	18.2(d)	Not Applicable
Minimum amount of third party insurance	18.3	Limited to Accepted Contract Amount for each occurrence, with unlimited number of occurrences
Date by which the DB shall be appointed	20.2	As and when required
The DB shall be comprised of	20.2	One Member (ad hoc)
Appointment (if not agreed) to be made by:	20.3	Chartered Institute of Arbitrators (Kenya)
Place and Seat of arbitration	20.6(a)	Nairobi, Kenya

Signature of Tenderer..... D

Date

FORM CON – 1 HISTORICAL CONTRACT NON-PERFORMANCE, PENDING LITIGATION AND LITIGATION HISTORY

Tenderer's Name: _____ Date: _____

JV Member's Name_____

ITT No. and title: _____

Non- Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria Contract non-performance did not occur for the last three (3) years from the day of tender opening. Contract(s) not performed for the last three (3) years from the day of tender opening

Year	Non- performed	Contract Identification	Total Contract Amount (Kenya
	portion of contract		Shilling equivalent)
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/number; and any other identification] Name of Procuring Entity: [insert full name] Address of Procuring Entity: [insert street/city/country] Reason(s) for non-performance: [indicate main reason(s)]	[insert amount]

Pending Litigation, in accordance with Section III, Qualification Criteria and Requirements

 No pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 8.

Pending Litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor
 9 as indicated below

	Amount in	Contract Identification	Total Contract
dispute	dispute		Amount (Kenya
	(currency)		Shilling equivalent)
		Contract Identification:	
		Name of Procuring Entity:	
		Address of Procuring Entity:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
		Contract Identification:	
		Name of Procuring Entity:	
		Address of Procuring Entity:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
Litigation H	istory in accordance w	vith Section III, Evaluation and Qualification	Criteria

□ No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4.

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

Year of award	Outcome as	Contract Identification	Total Contract
	percentage of Net		Amount (Kenya
	Worth		Shilling equivalent)

Signature of Tenderer...... D

Date

FORM CON – 2: DECLARATION FORM – FAIR EMPLOYMENT LAW AND PRACTICES

Date

To The Director General, Kenya National Highways Authority (KeNHA), P.O. Box 49712-00100 NAIROBI

We (name and address)_____

<u>d</u>eclare the following:

- 1. Have not been involved in and will not be involved in violation of fair employment laws and practices.
- 2. THAT what is declared herein above is true to the best of my knowledge, information and belief

Name of Bidder's authorized Representative	Signature	Date
(To be signed by authorized representative and officia	ally stamped)	

FORM CON - 3: DECLARATION OF KNOWLEDGE OF SITE

This is to certify that

[Name/s].....

.....

Being the authorized representative/Agent of [Name of bidder]

.....

.....

Has familiarised himself/herself with the Site conditions in accordance with the Instructions to bidders and the Tender Notice for purposes of bidding for this road project.

CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD

Having studied the tender Documents, and gained knowledge of local conditions on site likely to influence the works and cost thereof, I certify that I am satisfied with the description of the works and understand the scope of works as specified and as implied in this tender.

(Signed and Stamped by Authorised Bidders Agent/ Representative) (Designation)

FORM FIN – 3.1: FINANCIAL SITUATION AND PERFORMANCE

PART 1

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

1. Financial data Type of Financial information (Kenya **Historic information for previous** Shillings) years, (amount in Millions (KSh.) 2022 2021 2023 Statement of Financial Position (Information from Balance Sheet) Total Assets (TA) Total Liabilities (TL) Total Equity/Net Worth (NW) Current Assets (CA) Current Liabilities (CL) Working Capital (WC) Information from Income Statement Total Revenue (TR) Profits Before Taxes (PBT) **Cash Flow Information** Cash Flow from Operating Activities

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2. Sources of Finance

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

No.	Source of finance	Amount (Kenya Shilling equivalent)
1	Letter of line of Credit from a recognized Financial Institution	
2	Bank account balance (demonstrated by bank statements)	
3		

3. Financial documents

The Tenderer and its parties shall provide copies of financial statements for the last *three (3)* years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- a) Reflect the financial situation of the Tenderer or in case of JV member, and not an affiliated entity (such as parent company or group member).
- b) Be independently audited or certified in accordance with local legislation.
- c) Be complete, including all notes to the financial statements.
- d) Correspond to accounting periods already completed and audited.

Attached are copies of financial statements for the three (3) years required above; and complying with the requirements

PART 2

Detailed Financial Situation Evaluation

No.	Description	Auditors Assessment 2021	Auditors Assessment 2022	Auditors Assessment 2023	Evaluation Score Award Criteria
1.	Current Ratio= <u>Current Assets</u> Current Liabilities				Current Ratio more than 1 = 1 marks
2.	Debt to Equity Ratio = <u>Total Liabilities</u> Total Equity				Equity Capital Ratio less than 1 = 1 Marks
3.	Working Capital = Current Assets-Current Liabilities				Positive Working Capital = 1 marks
4.	Operating Cash Flow Ratio = Cash Flow from <u>Operations</u> Current Liabilities				Operating Cash- flow more than 1 = 1 marks
5.	Working Capital in Ksh.	Working Capital is equal or more than 10% of Engineers Estimate= 4 Marks			

The above Financial Ratios have to be derived from first Principles from the Audit Statements. The Auditor who has undertaken the analysis has to demonstrate the financial ratios and append his signature and stamp to the Document as below:

The Auditor shall be required to provide his/her workings and demonstrate the source of the workings from the various Audited statements by including the Page Numbers and references of the source of the figures used in the computation of the assigned values.

The Auditor undertaking the above Financial Analysis MUST duly fill the Contact Sheet below in all aspects and attach current annual practising license.

Financial ratios Computed by a Certified Public Accountant:

CPA: Name	
ICPAK Number	
Telephone Number	
Email Address	
Postal Address	
Physical Address	
Contact Person	
Mobile Contact of the	
Contact Person	
Signature	
Date	
Personal/Corporate Stamp	

Ratios attested by the Company Director:

Director's Name	
ID/Passport Number	
Telephone Number	
Email Address	
Postal Address	
Physical Address	
Signature	
Date	
Personal/Corporate Stamp	

FORM FIN – 3.2: AVERAGE ANNUAL CONSTRUCTION TURNOVER

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

Annual turnover data (construction only)				
Year	Amount Currency [insert amount and indicate currency]	Exchange Rate (where applicable)	Kenya Shilling equivalent	
2018				
2019				
2020				
Average Annual				
Construction				
Turnover*				

* See Section III, Evaluation and Qualification Criteria.

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

FORM FIN - 3.3: CURRENT CONTRACT COMMITMENTS / WORKS IN PROGRESS

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

Cı	Current Contract Commitments						
No.	Name of Contract	Procuring Entity's Contact Address, Tel, Fax	Value of Outstanding Work (Kenya Shilling equivalent)	Completion Date	Average Monthly Invoicing Over Last Six Months [KSh/month]		
1							
2							
3							
4							
5							

FORM EXP - 4.1: GENERAL CONSTRUCTION EXPERIENCE

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

Starting Year	Ending Year	Contract Identification	Role of Tenderer
		Contract name:	Main Contractor/ Subcontractor/ Management
		Brief Description of the Works and Services performed by the Tenderer:	Contractor
		Amount of contract:	
		Name of Procuring Entity:	
		Address:	
		Contract name:	
		Brief Description of the Works and Services performed by the Tenderer:	
		Amount of contract:	
		Name of Procuring Entity:	
		Address:	
		Contract name:	
		Brief Description of the Works and Services performed by the Tenderer:	

	Amount of contract: Name of Procuring Entity:	
	Address:	

FORM EXP - 4.2(A): SPECIFIC CONSTRUCTION AND CONTRACT MANAGEMENT EXPERIENCE

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

Similar Contract No	Information			
Contract Identification				
Award date				
Completion date		1	1	
Role in Contract	Prime Contractor	Member in JV	Management Contractor	Sub- Contractor
Total Contract Amount			Kenya Shillings	
If member in a JV or sub-contractor, specify participation in total Contract amount				
Procuring Entity's Name:				
Address:				
Telephone/fax number				
E-mail:				
Description of the similarity in accordance with Sub-Factor 4.2(b) of Section III:				
1. Amount				
2. Physical size of required Works and Services items				
3. Complexity				

4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	

FORM EXP - 4.2(B): CONSTRUCTION EXPERIENCE IN KEY ACTIVITIES

Tenderer's	Name:
------------	-------

Date:

Tenderer's JV Member Name:

Sub-contractor's Name (as per ITT 33.2):

ITT No. and title:

Page of _____pages

All Sub-contractors for key activities must complete the information in this form as per ITT 33.2 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One:_____

	Informatio	n			
Contract Identification					
Award date					
Completion date					
Role in Contact	Prime Contractor	Mer JV	nber in	Management Contractor	Sub- Contractor
Total Contract Amount				∟ Kenya Shillir	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantit the contract (i)	y in	Percen partici (ii)	pation	Actual Quantity Performed (i)*(ii)
Year 1					
Year 2					
Year 3					
Year 4					

Procuring Entity's Name:	
Address:	
Telephone/fax number	
E-mail:	
Information	
Description of key activities in accordance with Sub-Factor 4.2(b) of Section III:	

If applicable

2 Activity No. Two

3.

TECHNICAL PROPOSAL

The Tenderer's Technical Proposal shall include the following

elements:

SCHEDULE A. Projected Cash Flow

SCHEDULE B. Site Organization

SCHEDULE C.

Subcontractors

SCHEDULE D. Contractor's Equipment

SCHEDULE E. Initial Tentative Program of

Performance

SCHEDULE F. Key Personnel Proposed

SCHEDULE G. Schedule of Material Basic prices

Instructions on how to present the various schedules of the Technical Proposal are given on the following pages

SCHEDULE A

Projected Cash Flow

- 1) Tenderers shall tabulate below estimates, based on their preliminary work programme, of:
 - a) On the expenditure side, the value of the work which will be carried out;
 - b) On the revenue side, the net payments to which they will become entitled with due allowance for the advance payment and repayment, materials prepayments, and retention money, but excluding price adjustments for rise and fall and provisional sums for emergency works.
 - c) The projected net cash flow during the contract period.
- 2) The prospective successful Tenderer may be required to submit full details to substantiate his estimates.

Period (Months)	Cost of Rehabilitation and Improvement Works	Net Payment to be received	Net Cash flow
1-6			
7-12			
13-18			
19-24			
25-30			
31-36			
37-42			
43-48			
ETC			

SCHEDULE B

Site Organization

Tenderers shall give below full particulars of the organization they propose to establish, direct, and administer the performance of the Contract. In particular, Tenderers shall indicate the location of site camps and the resources they intend to allocate to Self-Control Units for planning and monitoring purposes.

- 1. SITE ORGANIZATION CHART
- 2. NARRATIVE DESCRIPTION OF SITE ORGANIZATION CHART

SCHEDULE C

SUB-CONTRACTORS / PARTNERS

Tenderers shall list below those parts of the Works and Services which they propose to subcontract, and state the approximate value of those parts and the names and addresses of the proposed subcontractors, if those are known at Tendering stage. Tenderers shall also list other business partners involved in the execution of the contract and their respective roles and responsibilities.

Part of Works / Services: Approxima te value: Name and address of proposed subcontractor / partner: Part of Works / Services: Approximat e value: Name and address of proposed subcontractor / partner: Part of Works / Services: Approximat e value: Name and address of proposed subcontractor / partner:

Part of

Works /

Services:

Approximat

e value:

Name and address of proposed subcontractor / partner:

SCHEDULE D

Contractor's Equipment Form EQU

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

Item of equipmer	nt	
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current Status	Current Location:	I
	Details of current commitments	<u>;</u>
Source	Indicate source of equipment Owned Rented	Leased Specially manufactured

Omit the following information for equipment owned by the Tenderer.

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

SCHEDULE E

Initial Tentative Program of Performance

To demonstrate a clear understanding of the requirements of the Contract, Tenderers shall provide the following:

- i) A bar chart sub-divided into sections for each road showing the major activities to be carried out for Maintenance Services, Rehabilitation Works and Improvement Works, if any. The activities shall be shown against time, with linkages shown between related/sequential activities as far as possible and appropriate.
- ii) A bar chart or schedule showing the usage of major plant, including those listed in Schedule D (Contractor's Equipment).

SCHEDULE F

Form PER -1 Key Personnel Schedule

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

Key Personnel

1.	Title of position: Site Agent Name of candidate:				
	Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]			
	Time commitment for this position:	[insert the number of days/weeks/months that has been scheduled for this position]			
	Expected time schedule for this position:	Full time site presence			
2.	Title of position:				
	Name of candidate:				
	Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]			
	Time commitment for this position:	[insert the number of days/weeks/months that has been scheduled for this position]			
	Expected time schedule for this position:	Full time site presence			

Countersignature of authorized representative of the Tenderer:

Signature:

Date:

(day

month

year):

Form PER -2

Resume and Declaration – Key Personnel

Name of Tenderer

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

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

Project		Duration of involvement	Relevant experience
[main project details	[role and responsibilities on the project]		[describe the experience relevant to this position]

Declaration

I, the undersigned Key Personnel, certify that to the best of my knowledge and belief, the information contained in this Form PER -2 correctly describes myself, my qualifications and my experience.

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

serie and for any position as provide any	chiedale for and position as provided in the render.				
Commitment	Details				
Commitment to duration of contract:	[insert period (start and end dates) for which this Key				
	Personnel is available to work on this contract]				
Time commitment:	[insert the number of days/weeks/months that this Key				
	Personnel will be engaged]				

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

- a) be taken into consideration during Tender evaluation;
- b) my disqualification from participating in the Tender;

c) my dismissal from the contract.

Name of Key Personnel: [insert name]

Signature:

Date: (day month year):

Countersignature of authorized representative of the Tenderer:

Signature:

Date:	(day	month	year):

FORM OF TENDER SECURITY - DEMAND GUARANTEE

Beneficiary:	
Invitation to Tender No:	
Date:	
TENDER GUARANTEE No.:	
Guarantor	

We have been informed that ______(herein after called "the Applicant") has submitted or will submit to the Beneficiary its Tender (hereinafter called "the Tender") for the execution of under Invitation to Tender No._____("the ITT").

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

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _________ upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- a) Has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Form of Tender ("the Tender Validity Period"), or any extension there to be provided by the Applicant; or
- b) Having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to be provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to Tenderers ("ITT") of the Beneficiary's Tendering document.

This guarantee will expire:

- a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the performance Security and, issued to the Beneficiary in relation to such contract agreement; or
- b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) twenty-eight days after the end of the Tender Validity Period.

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

[signature(s)]

SCHEDULE G

PART I. SCHEDULE OF MATERIALS; -BASIC PRICES

ITEM	DESCRIPTION	NAME OF	COUNTRY	UNIT	RATI	-
NO		SUPPLIER	OF ORIGIN		KSH.	CTS
1.	Cut-back Bitumen MC 30			Litre		
	in bulk					
2.	Cut-back Bitumen MC 30			Litre		
	in drums					
3.	Bitumen 60/70 in bulk			Kg		
4	Bitumen 60/70 in drums			Kg		
5	Bitumen Emulsion K1-60 in bulk			Litre		
6.	Bitumen Emulsion K1-60 in drums			Litre		
7.	Petrol, Regular Grade			Litre		
8.	Petrol, Premium/ super			Litre		
	Grade					
9.	Automotive Diesel Fuel			Litre		
10.	Industrial Diesel Oil			Litre		
11.	Industrial Fuel Oil			Litre		
12.	Kerosene Fuel			Litre		
13.	Cement			Tonne		
14.	Flex beam Guardrail			Metre		
15.	Gabion Mesh			M ²		
16.	Reinforcing Steel			Tonne		
17.	Lime			Tonne		

I certify that the above information is correct

(Title)

.....

(Signature)

(Date)

The prices inserted above shall be those prevailing 30 days before the submission of Tenders and shall be quoted in Kenya Shillings using the prevailing exchange rates by Central Bank Kenya. Prices of imported materials to be quoted CIF Mombasa or Nairobi as appropriate depending on whether materials are imported by the tenderer directly or through a local agent.

PART II. SHEDULE OF RATES DERIVATION (For use during Tender Evaluation)

	Form for Det	ailed Breakdo	own of Cos	t Compar	ison	
Bill item No.]
Description						
Units						2
Quantity						
Rate build up a) Direct cost (DC)	i) Unit work Price	1) Material Cost				
		Description	Units	Quantity	Market Price	Amount
		Sub Total For	Material			
		2) Labour				
		Price				1
		Personnel	No.	Rate	Amount	
		Personner	Required	/day	Amount	-
						-
		Sub Total For	Labour			-
		Productivity ratio				
		3) Machinery				J
		Machinery	No.	Rate		
		type	Required	/day	Amount	Hired/Owned
		Sub Total for N	Machinery			
		Productivity				
		ratio				
	Sub-total of unit					
	price		_			
	Sum (1+2+3)					
	ii) Haulage Cost		7			
Sub-totals of DC]				
b) Indirect Cost]				
c) Overheads		•				
and Profits						
Total Cost		1				
Sum (a+b+c)						

Notes:

This form has been based on the principles of Cost Estimation Manual. The form shall be filled in upon request by the Procuring Entity during Tender Evaluation.

I certify that the above information is correct.

(Title)

(Signature)

(Date& Official Stamp)

FORM OF DECLARATION OF FAIR EMPLOYMENT LAWS AND PRACTICES

Date _____

То

(To be signed by authorized representative and officially stamped)

FORM OF DECLARATION OF CONTRACTS TERMINATED IN THE LAST THREE (3) YEARS

NAME OF CONTRACT	NAME OF CLIENT	VALUE OF WORKS (KSH.)	YEAR TERMINATED

Note: Failure to disclose terminated Contracts shall lead to disqualification.

I certify that the above information provided is true to best of my knowledge.

(Signature of Bidder)

(Date)

PART 2 - WORKS' REQUIREMENTS

SECTION VI - BILLS OF QUANTITIES

PREAMBLE TO BILL OF QUANTITIES

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications, and Drawings.
- 2. The brief description of the items in the Bill of Quantities is purely for the purpose of identification, and in no way modifies or supersedes the detailed descriptions given in the Conditions of Contract and Specifications for the full direction and description of work and materials.
- 3. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
- 4. There is no guarantee to the Contractor that he will be required to carry out all the quantities of work indicated under any one particular item or group of items in the Bill of Quantities.
- 5. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract, transport, electricity and telephones, water, use and replenishment of all consumables, including those required under the Contract by the Engineer and his staff.
- 6. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 7. Any entry of "nil" unless deemed justifiably covered elsewhere in the Bill of Quantities, may lead to the entire Bid being rejected.
- 8. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
- 9. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
- 10. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which no instruction will be required from the Engineer.

- 11. Prime Cost Sum (PC Sum) is a sum provided for plant, Materials or services to be purchased by the Contractor from nominated Subcontractor (as defined in Sub-Clause 5.2 [Nominated Subcontractors]) and for which there is to be included in the Contract Price:
- The actual amounts paid (or due to be paid) by the Contractor, and;
- A sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate stated in the appropriate schedule. If there is no such rate, the overhead charges and profit shall be deemed to have been included elsewhere in the bill item rates.
- 12. The method of measurement of completed work for payment shall be in accordance with the specifications.
- 13. "Authorized", "Directed" or "Approved" shall mean the authority, direction or approval of the Engineer.
- 14. Unless otherwise stated, all measurements shall be taken on the finished work carried out in accordance with the details shown on the drawings or instructed, with no allowance for extra cuts or fills, waste or additional thickness necessary to obtain the minimum finished thickness or dimensions required in this contract. Any work performed in excess of the requirements of the plans and Specifications will not be paid for, unless ordered in writing by the Engineer.
- 15. (a) Hard material, in this Contract, shall be defined as the material which, in the opinion of the Engineer, requires blasting, or the use of metal wedges and sledge hammers, or the use of compressed air drilling for their removal, and which cannot be extracted by ripping with a dozer tractor of at least 300 kilowatt power (Caterpillar D9 or equivalent) with a single, rear mounted, hydraulic ripper. Boulders of more than 1.0m3 occurring in soft material shall be classified as hard material.
- (b) Soft material shall be all material other than hard material.
- 17. Units of Measurement
- The following units of measurement and abbreviations are recommended for use (unless other national units are mandatory in the country of the Employer).

Unit	Abbreviation	Unit	Abbreviation
cubic meter	m ³ or cu m	Millimetre	mm
hectare	ha	month	mon
hour	h	number	nr
kilogram	kg	square meter	$m^2 or sq m$
lump sum	sum	square millimetre	mm ² or sq mm
meter	m	week	wk
metric ton	t		
(1,000 kg)			

The price and rates entered in the Bills of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional plant to be used, labour, insurance, supervision, compliance testing, materials, erection, maintenance of works, overheads and profits, taxes and duties together with all general risks, liabilities and obligations set out or implied in the Contract, transport, electricity and telephones, water, use and replenishment of all consumables, including those required under the contract by the Engineer and his staff.

SUMMARY OF BILL OF QUANTITIES					
	CONSTRUCTION OF FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD				
BILL No.	DESCRIPTION	BILLED AMOUNT (KES.)			
1	Preliminary and supervisory/support services				
4	Site Clearance and Top soil Stripping				
5	Earth Works				
7	Excavation and Filling for Structures				
8	Culverts and Drainage works				
9	Passage of Traffic				
11	Footpaths				
12	Natural material, subbase and base				
13	Grade Crushed Stone Subbase and Base				
14	Cement and Lime treatment				
15	Bituminous Surface Treatment and Surface Dressing				
16	Bituminous Mixes Bases Binder Courses and wearing Courses				
17	Concrete Works				
19	Structural Steel				
20	Road Furniture				
21	Miscellaneous Bridge Works				
24	Landscaping and Environmental Mitigation Measures				
25	Electrical and Mechanical Installations				
26	HIV/AIDS awareness				
Α	SUBTOTAL 1				
В	Allow 7.5% of Sub – Total 1 for Contingencies				
С	Allow 7.5% of Sub – Total 1 for Variation of Price				
D	Allow 0.03% of Sub – Total 1 PUBLIC PROCUREMENT CAPACITY BUILDING LEVY				
E	SUB TOTAL 2 (A +B+C+D)				
F	Allow 16% of Sub – Total 2 for VAT				
G	GRAND TOTAL (E+F)				

CONSTRUCTION OF PEDESTRIAN FOOTBRIDGE AT KIHUNGURO ON THIKA SUPERHIGHWAY (S1) ROAD					
BILL OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (KSH.)
			BILLED		BILLED
BILL NO. 1: PRELIMINARY AND SUPERVISORY SERVICES					
1.01A	Allow a Sum for quality control material testing by the Material Testing and Research Division (MTRD) of the Ministry of Roads and Transport against receipts	Sum	1	3,136,600	
1.01B	E.O. item 1.01A for the Contractors overheads and profit	%	3,136,600		
1.02A	Allow Prime Cost sum for relocation of services	PC sum	1	10,000,000	
1.02B	Include a percentage of item 1.02A for contractor's overheads and profit	%	10,000,000		
1.03	Provide, erect and maintain publicity signboards as directed by the Engineer.	No.	2		
1.04A	Provide with driver and maintain 1 No, minimum 2.8 litre turbocharged 4- wheel drive, twin-cab pickup vehicles or similar approved by the Engineer for the exclusive use of the Engineer inclusive of the first 4,000 km per vehicle month approved in accordance with clause 138 of the special specifications.	Veh. Month	30		
1.04B	E.O on Item 1.04A inclusive of fuels, maintenance, lubricants and servicing for kilometre over 4,000 km per vehicle month.	Km	15,000		
1.05A	Provide, fuel and maintain for the duration of the contract, complete with drivers and comprehensive insurance, one (1) fully loaded 4WD SUV Station Wagon of minimum 3000ccTurbo diesel engine capacity complete with weather shields, stainless steel nudge bar, tonneau cover; hard sports type, lockable all as per special specifications and approved by the Engineer, inclusive of the first 4000km per vehicle month. approved in accordance with clause 138 of the special specifications	Veh month	30		
1.05B	Extra over on Item 1.05A inclusive of fuels, maintenance, lubricants and servicing for kilometre over 4,000 km per vehicle month.	Km	15,000		
1.06	Allow a sum for the Engineer's miscellaneous account to be spent in whole or part as instructed by the Resident Engineer and to be reimbursed against receipts	Sum	1.00	4,140,000	

					1
1.07A	Allow sum for NEMA Licence as instructed by the Engineer	Sum	1.00	255,000	
1.07B	Include a percentage of item 1.07A for the Contractor's overheads and profit.	%	255,000		
1.08A	Allow sum for geotechnical investigations to be spent in whole or part as directed by the resident engineer	Sum	1	1,000,000	
1.08B	Include a percentage of item 1.08A for Contractor's overheads and profits	%	1,000,000		
1.09A	Provide a Sum for reimbursement to the Contractor for payment of Engineer's support staff and allowance as in accordance with clause 137 of the special specifications	Sum	1	13,050,000	
1.09B	Include a percentage of item 1.09A for Contractor's overheads and profit	%	13,050,000		
Total of B	ill No.1 carried forward to Grand Sumn	nary page	2		
BILL NO.	4: SITE CLEARANCE AND TOP SOI	L STRIP	PING		
4.01	Clear site on road reserve including removal of trees of diameter, hedges, bushes and other vegetation or deleterious organic material, grub up roots and backfilling of holes left by removal of stumps and roots to 100% MDD (AASHTO T99) with approved material in accordance with the specification. And dismantling of structures on roadway including Stone masonry, Plain Concrete, Reinforced Concrete, Dismantling of pavement, culverts, Footpaths and medians, fence , bus shelters etc.	Ha.	0.3		
4.02	Removal of unsuitable material / top soil to an approved depth and disposal as directed by the Engineer.	m ³	523		
Total of B	ill No.4 carried forward to summary pag	ge			
BILL NO.	5: EARTH WORKS				
-	ate payment shall be made for the haulag	-	lus or unsuitable	e excavated mate	rial and the cost of
<u>such haula</u> 5.01	age shall be included in the rates and/or Fill in construction of embankment, benching of shoulders with approved soft material with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to 95% MDD (AASHTO T99) in accordance with the specification.	m ³	302		
5.02	Construction of sub- grade and earthen shoulders with approved material with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to 100% MDD (AASHTO T99).	m ³	151		
5.03	Compacting original ground supporting sub-grade: Loosening of the ground up to a level of 300 mm below the sub-grade level, watered, graded and compacted in layers to meet requirement for sub-grade construction.	m ³	151		

5.04	Scarifying to a depth of 150mm, levelling and compacting original ground to 95% MDD (AASHTO.T99)	m ³	76		
5.05	Cut to Spoil in Soft Material	m ³	479		
5.06	As Item 5.05 but hard material	m ³	53		
Total of B	ill No.5 carried forward to summary page	ge			
BILL NO. 7: EXCAVATION AND FILLING FOR STRUCTURES					
7.01	Excavate in soft material for structure	m ³	1,280		
7.02	As Item 7.01 but Hard Rock (blasting prohibited)	m ³	130		
7.03	Provide and place hardcore below structures	m ³	305		
7.05	50 mm stone dust blinding to surfaces of hardcore to receive concrete	m ²	310		
Total of B	ill No. 7 carried forward to summary pa	ge			

BILL NO. 8: CULVERTS AND DRAINAGE WORKS.

No separate payment shall be made for the haulage of surplus or unsuitable excavated material and the cost of such haulage shall be included in the rates and/or prices

of such ha	ulage shall be included in the rates and/	or prices		1	
8.01	Excavate in soft material to any depth for pipe culverts, subsoil drains, headwalls, wing walls, aprons, toe walls, and drop inlets, mitre drains, catch water drains, median drains including support of trench sides, backfilling and compacting as specified or as directed by the Engineer.	m ³	60		
8.02	As Item 8.01 but in Hard Rock	m ³	10		
8.03	Provide, lay and joint 900mm diameter Precast Concrete pipes	m	30		
8.04	Provide, lay and joint 1200mm diameter Precast Concrete pipes	m	20		
8.05	Provide and place class 15/20 concrete to beds, surrounds and haunches	m ³	40		
8.06	Provide and place class 25/20 concrete to headwalls, wing walls, aprons, toe walls, inlets and outlets to pipe culverts including formwork	m ³	30		
8.07	Provide place and compact Rock fill below culverts	m ³	50		
Total of Bi	ill No.8 carried forward to summary pag	ge			
BILL NO.	9: PASSAGE OF TRAFFIC				
9.01	Provide signs and barriers in accordance with Clause 907 of the Standard Specifications	Lump Sum	1		
9.02	Maintain the passage of traffic	Lump Sum	1		
Total of Bi	ill No. 9 carried forward to summary				
BILL NO.	11: FOOTPATHS				

11.01	Providing and fixing in the footpath Interlocking concrete pavers unishape (monolithic single layer precast concrete blocks) of any specified colour / size & shape, with approved pattern etc. of 60 mm thick having average crushing strength of 50 N/mm2 on average thickness of 50 mm uniformly graded river sand cushioning with properly compacted with mechanical compactor with required level, grade and camber etc. complete as directed by Engineer.	m²	330		
Total of Bi	ll No. 11 carried forward to summary				
	12: NATURAL MATERIAL BASE AN				
	te payment shall be made for the haulag alage shall be included in the rates and/o		lus or unsuitable	excavated mater	rial and the cost
12.01	Provide, place and compact natural gravel material to carriageway, junctions accesses and bus bays as directed by the Engineer	m ³	150		
12.02	Provide, place and compact natural gravel material to footpaths as directed by the Engineer	m ³	120		
Total of Bi	ll No. 12 carried forward to summary				
BILL NO.	13: GRADED CRUSHED STONE SUB	BBASE A	ND BASE		
13.01	Providing, mixing, spreading and compacting Graded Crushed Stone (GCS) for Base with all leads and lifts complete.	m ³	120		
Total of Bi	ll No. 13 carried forward to summary				
BILL NO.	14: CEMENT AND LIME TREATED	MATER	IAL		
14.01	Provision, storage, hauling, transport and spreading cement on graded crushed stone base.	tonne	15		
14.02	Mix in cement in GCS (mix-in-place method)	m ³	120		
14.03	Allow for curing and protection of treated base as specified	m²	120		
Total of Bi	ll No. 14 carried forward to summary				
BILL NO.	15: BITUMINOUS SURFACE TREAT	MENTS	AND SURFACE	DRESSING	
15.01	Prepare surface of carriageway, shoulders, bus bays access and junctions, provide, heat and spray MC- 30 bitumen emulsion prime coat at a rate of spray of 1.0 litre per square metre with all leads and lifts complete.	Lts	150		

		·							
15.02	Clean and prepare surfaces, provide and spray K1-60 bitumen emulsion as tack coat to carriageway at a spray rate of 0.5 litres/m2 as directed by the Engineer with all leads and lifts complete.	Lts	300						
Total of Bi	III No. 15 carried forward to summary								
	BILL NO. 16: BITUMINOUS MIX BASES BINDER COURSES AND WEARING COURSES								
	aulage will be paid for bitumen or chip								
	Provide, lay and compact Asphalt	pings, an	u this should be i		ites tendered.				
16.01	Concrete (AC) with modified bitumen and 0/14mm aggregates on prepared surface of asphalt base layer with all leads and lifts (excluding tack coat) complete.	m ³	30						
16.02	Provide, lay and compact Dense Bituminous Concrete (DBM) with modified bitumen and 0/30mm aggregates on prepared surface of granular base layer with all leads and lifts (excluding tack coat) complete.	m ³	70						
Total of Bi	Il No. 16 carried forward to summary	•							
	17: CONCRETE WORKS								
DILL NU.									
17.01	Provide, place and compact blinding concrete Class 15 (20) to foundations, rate including form work erection and dismantling.	m ³	20						
17.02	Provide, place and compact concrete class 30 (20) in sub-structure (column bases), rate including form work erection and dismantling.	m ³	290						
17.03	Provide, place and compact concrete class 30(20) to superstructure columns	m ³	140						
17.04	Provide, place and compact concrete class 30 (20) to superstructure; deck slabs, ramp slabs, stairs.	m ³	330						
17.05	Provide, place 50mm of hardened screed to ramp and deck	m ³	50						
17.06	Unformed surface finish class UF1 to top of foundation	m²	220						
17.07	Unformed surface finish class UF2 to top of deck	m²	850						
17.08	Class F3 finish to soffit of deck	m ²	600						
17.09	Ditto but side and soffit of beams Vertical formwork to achieve class F2	m²	660						
17.10	finish	m²	1,250						
17.11	Vertical formwork to achieve class F3 finish	m²	260						
	REINFORCEMENT								
	Provide, cut, bend and fix as shown on drawing and as specified in the following items of reinforcement.								
17.12	High Yield Strength reinforcement bar to BS 4449, of diameter equal to or less than 16mm	Tonne	38						
17.13	High Yield Strength reinforcement bar to BS 4449, of diameter more than 16mm	Tonne	38						

Total of Bill No. 17 carried forward to summary

BILL NO. 19: STRUCTURAL STEEL

Design, submission of orders, fabrication drawings, details and supply of structural steel works including material bolts, cleats, nuts, washers, welding rods, shear studs, plates & gusset plates and all other fixings and erection requirements, priming, painting etc. to Engineer's approval etc. complete as per drawing and standard specification

standard s	pecification			
	Provide and install grade S355 steel			
1	trussed girder(curved) welded to			
10.01	specifications and formed to achieve a			
19.01	camber of 50mm inclusive of			
	stiffeners, splice and all other			
	connections			
	Provide and install 300x300x8mm			
	Square Hollow Sections grade S355			
(i)	steel welded/bolted to specifications	Tonne	15	
	inclusive of all connections (as bottom			
	chord)			
	Provide and install 250x250x8 Square			
	Hollow Sections grade S355 steel			
(ii)	welded/bolted to specifications	Tonne	13	
()	inclusive of all connections (as top			
	chord)			
	Provide and install 150 x150x10			
<i>(</i>)	Square Hollow Sections grade S355	T	10	
(iii)	steel welded/bolted to specifications	Tonne	12	
	inclusive of all connections (As			
	Internal Members)			
	Provide and install 150 x150x6 Square			
	Hollow Sections grade S355 steel			
(iv)	welded/bolted to specifications	Tonne	5.5	
	inclusive of all connections (As			
	Internal Members)			
	Provide and install 250 x250x8 Square			
	Hollow Sections grade S355 steel			
(v)	welded/bolted to specifications	Tonne	1.5	
(•)	inclusive of all connections (As end	Ionne	1.5	
	posts)			
	Provide and install 200 x 150x8mm			
19.02	RHS grade S355 steel welded/bolted to	Tonne	6	
17:02	specifications inclusive of all	ronne	0	
	connections (As Deck Beams)			
	Provide and install 100 x 100x8mm			
19.03	Angles grade S355 steel as deck	Tonno	2.0	
19.05	bracings welded/bolted to	Tonne	3.8	
	specifications inclusive of connections			
	Provide and install 1.0 mm grade S355			
	profiled deck steel plates as bridge deck	_		
19.04	formwork welded to specifications	Tonne	2.8	
	inclusive of connections			
	Provide and install 12mm thick mild			
19.06	steel plate as baluster spaced at 1450	Tonne	10	
19.00		Tonne	10	
	mm c/c and as per details			
	Provide and install 50 mm ϕ x 3.0 mm			
19.07	thick horizontal and raking hollow mild	m	5,320	
122.07	steel section handrail welded to		2,220	
	balusters as per details			
	Provide and install 244x5mm CHS			
	grade S275 steel as decorative arch			
19.08	member welded/bolted to	Tonne	25	
	specifications inclusive of all		-	
	connections			
L		1		

Total of B	ill No. 19 carried forward to summary			
BILL NO	20: ROAD FURNITURE			
	Road Marking and Road Signs			
	Road Marking			
	Providing and laying hot applied			
	thermoplastic road marking compound			
	in approved colour and shade (ASTM			
	9) for road marking on bituminous			
	surface in centre line 100mm, edge			
	line 150mm wide 3.0mm thick using			
	fully automatic extrusion machine and using pre-melter for melting			
20.01	thermoplastic Material including			
	cleaning the surface of all dirt, dust,			
	and other foreign matter, demarcation			
	at site/ pre-marking, finishing and			
	managing the traffic control etc.			
	Complete. Marking to be done as per			
	specifications, detailed drawings and			
	as directed.			
	(i) For Lane marking (broken line) with white paint-100mm wide and	m²	27	
	200mm wide for bus bays	111	27	
	(ii) For Edge lines (continuous line)	2	26	
	with white paint-150mm wide	m²	36	
	Permanent Road Signs			
	Supplying and fixing			
	cautionary/warning road sign boards			
20.02	made up with high intensity grade	No.	2	
	retro-reflective type sheeting (ASTM 9) complete as per drawing and			
	technical specifications.			
	Supplying and fixing			
	regulatory/mandatory road sign boards			
20.03	made up with high intensity grade	No.	2	
20.03	retro-reflective type sheeting (ASTM	INU.	2	
	9) complete as per drawing and			
	Technical specifications.			
	Supplying and fixing informatory road sign boards made up with high			
20.04	intensity grade retro-reflective type			
20.04	sheeting complete as per drawing and			
	Technical specifications.			
	(i) Area less than 1.0 m2	No.	2	
	(ii) Area more than 1.0 m2, but less	No.	2	
	than 2 m2	110.	2	
	(ii) Area more than 2.0 m2, but less	No.	2	
	than 5 m2Provide and fix concrete Edge Marker			
	Posts on the outer edge of shoulder as			
20.05	per drawing, specifications and as	No.	4	
	directed by Engineer.			
	Excavate for, provide and place 440 x			
	250mm precast concrete kerb			
	haunched in 100mm thick class 15/20			
20.06	concrete base bedding and mortar			
	jointed in support to carriageway,			
	busbays and junctions as directed by			
	the Engineer. (a) Straight kerbs		135	

	(b) Radius kerbs	m	14		
	Provide for the fence between the				
20.07	raised kerbs as shown in the drawings	m	200		
20107	or as directed by the Engineer		_00		
	Provide, lay and joint 150mm x 50mm				
20.08	precast concrete edging on the	m	132		
	walkways				
	Provide and place 20/20 Bollard size				
	1.2m * 0.1m * 0.1m embedded to a				
20.09	depth 0.2m where directed by the	m	12		
	Engineer				
	Linginicer				
	Provide for branding and painting to				
20.1	the Employer's Specification as	Prov.	1		
20.1	directed by the Engineer	Sum	1		
	directed by the Englicer				
Total of Bi	ll No. 20 carried forward to summary				
	21: MISCELLANEOUS BRIDGE WO	DKS			
DILL NO.		KKS			E
	Provide and apply "Thioflex 600" or similar approved cold poured				
	polysulphide joint sealant (30mm deep				
21.01	by 25mm wide at movement joints as	m	70		
	specified to Engineer's satisfaction and				
	approval.				
	Reinforced Cement Concrete crash				
	barrier in Grade 30/20 including cost of				
21.02	reinforcement, steel plates and pipes	m	55		
21.02	complete as per drawing and Standard	m	33		
	Specification for Road and Bridge				
	Construction				
	Provide and apply 25mm thick				
21.03	"Flexcell" low compression or similar	m	70		
	approved joint Filler to movement				
	joints Drainage Spouts including 100 dia GI				
	pipes complete as per drawing and				
21.04	Standard Specification for Road and	No.	10		
	Bridge Construction Specification				
	Supply and fix bearings complete as				
21.05	per drawings and as per BS:5400 part				
21.03	9.2, BS 3784:1973 and as directed by				
	Engineer				
	a) Sliding bearing	N	5		
	Capacity 700 KN Capacity 300 KN	No	5		
	b) Fixed bearing				
	Capacity 700 KN	No	3		
	Capacity 300 KN	110	5		
	Provide for branding and painting to				
21.06	the Employer's Specification as	Prov.	1	2,000,0000	
	directed by the Engineer	Sum		, , ,	
Total of Ri	ll No. 21 carried forward to summary				
I VIAL VI DI	n 190, 21 carrieu for ward to Summary				

BILL NO.	24: LANDSCAPING AND ENVIRONM	MENTAI	L MITIGATION	MEASURES	
24.01	Supplying, Stacking and Spreading of good earth and manure at site including royalty and carriage up to 15m	m ³	462		
24.02	Supplying, Stacking and Planting flowering / avenue trees of at least 1m height above the ground level in excavated pits of size 1.2m x 1.2m x 1.2m and after planting, removal and stacking of excavated earth to desired location, filling the pit with soil				
	a) Large and small tree	No.	50		
Total of Bi	ll No. 24 carried forward to summary				
BILL NO.	25: ELECTRICAL AND MECHANICA	AL INST	ALLATIONS		
25.01	Allow a Provisional Sum for Electrical installations, fixtures and fittings inclusive of the infra-structure	Prov Sum	1		
Total of Bi	ll No. 25 carried forward to summary				
BILL NO.	26: HIV/AIDS AWARENESS AND ED	UCATIO	DN		
26.01	Instituting an HIV/AIDS awareness campaign	No.	18		
26.02	Instituting and HIV/AIDS prevention campaign	No.	18		
26.03A	Allow a Prime Cost Sum for HIV/AIDS Training	PC sum	1	750,000.00	750,000.00
26.03B	Contractor's overheads and profits as a percentage of Sub-item 26.3 (a)	(%)			
Total of Bi	ll No. 26 carried forward to summary		1		

APPENDIX B						
NO.	DESCRIPTION	UNIT	Quantity	Rate(Ksh)	Amount (Ksh)	
1	A3 Photocopy Papers (White)	Reams	10			
2	A4 Photocopy Papers (White)	Reams	350			
3	A4 Photocopy Papers (Coloured)	Reams	120			
4	Paper Conqueror Laid A4 (Blue, Cream)	Reams	10			
5	External Hard Disk 1TB	No.	5			
6	In/Out-tray	No.	10			
7	Flash Disk 64GB (OTG)3.0	No.	10			
8	Reflector Jackets	No	200			
9	Gumboots	No.	50			
10	Rains coats	No.	50			
11	Diaries	No.	50	+ +		
12	Scientific Calculator	No	5	+ +		
13	Cordless Mouse	No	5			
13	Mouse Pads	No	10			
15	Mouse batteries	Pairs	20			
16	Quality Envelopes (A4)	9gsm	50			
17	Quality Envelopes (A4)	90gsm	30			
18	Stapler Removers	No.	20			
19	Binder clips (medium, Large)	Pkt	100			
20	Binding Spirals (10mm)		100			
20	Binding spirals (16mm)	pcs	100			
21	Binding Spirals (22mm)	pcs	100			
22	Binding Spirals (25mm)	pcs	100			
23		pcs				
	Binding Spirals (28mm)	pcs	50			
25	Rubber bands	Pkts				
26	Highlighters Marken Dana	Pkt	60			
27	Marker Pens	No.	60			
28	Executive Gel Pen (Parker Roller ball)	No.	30			
29	Ball Pens (Fine point) Assorted colours	pks	20			
30	Pen holder	No.	20			
31	Paper clip holder	No.	10			
32	Stick Notes(3*3)	No	200			
33	urgent stickers	Rolls	10			
34	Short Hand Note Books	dozen	100			
35	Biro Pens Sharp Pointed- Black	Pkt	12			
36	Biro Pens Sharp Pointed Blue	No.	12			
37	Biro Pens Sharp Pointed Red	No.	12			
38	Box File Medium (PVC)	No.	200			
39	Counter Books A4 (2 Quire)	No.	50			
40	Envelopes Brown Size 4.3 X 8.7 Inch	No.	200			
41	Envelopes Brown - A3	No.	200	+ +		

42	Envelopes Brown-A4	No.	250	
43	Envelopes Brown-A5	No.	200	
44	Highlighting Pens	dozen	10	
45	Paper Punch Medium	No.	5	
46	Paper Punch Giant	No.	3	
47	Measuring Tapes 30fts	No	10	
48	Pelikan ink 273	No.	50	
49	Staple Pins 24/6	Pkts	250	
50	Staple Pins Giant	Pkts	50	
51	Stapler	No	10	
52	Paper Clips 33mm	Pkts	150	
53	White Out	No.	60	
54	Cello tape 1 inch	No.	60	
55	Embossed Covers (Blue & Green)	Reams	100	
56	Binder Clips (32mm)	Pkts	200	
57	Clear Pocket Folder	pcs	150	
58	Glue Stick Pritt	No.	360	
59	Masking tape	No	12	
60	Bulbs	No.	50	
61	Pencils	Box (12 pcs)	5	
62	Delivery Book	No.	12	
63	Stick notes (Sign here)	Psc	12	
76	Dust Coats (BrandedTwill Material)	No.	50	
77	Milk	Box (12 pcs)	120	
78	Coffee	No.(500gm)	200	
79	Ketepa tea leaves	Pkts	200	
80	Assorted tea leaves	Pkts	30	
81	Chocolate	No	100	
82	Sugar	Kgs	300	
83	Kitchen towels	No	36	
84	Gloves Plastic	Pairs	12	
85	Door mats	No	10	
86	Serviettes	Dozens	24	
87	Dust Bins	No	12	
88	Air fresheners	No	50	
89	Soap Dispenser	No	8	
90	Antibacterial foam soam 1 litre	No	60	
91	Refill sanitizers	No	12	
92	Folded Paper 1 bale	No	12	
93	Jumbo tissues 1 bale	No	12	
95	Hand Sanitizers (500) ml	No.	60	
96	Face Masks 3 ply	Pkts	120	
97	Hand washing gels (Dettol).250 ml	No.	60	
98	Refillable Drinking water (20LTS) Bottle	No.	150	
99	Drinking water (Small bottles)	Box (12 pcs)	240	
100	Shredder	No.	2	

101	File cabinet	No.	2		
102	Office cabinet(Metal Lockable)	No.	2		
103	First aid kit	No.	3		
104	Office Fumigation	M^2	800		
105	Microsoft Office (Latest Version)	No.	3		
106	Microsoft Project (Latest Version)	No.	3		
107	UPS 1KVA surge protector	No	10		
108	Fire Extinguisher	No	4		
109	Lunches	SUM	1	500,000.00	
110	E.O item for Lunch	%			
111	Airtime	SUM	1	300,000.00	
112	E.O item for Airtime	%			
113	Provide and maintain the Engineer's staff mobile Phones as per Special Specifications	No	3		
GRAND 1	COTAL CARRIED FORWARD	FO BILL ITEM 1	.05		

NO.	Description	UNIT	QUANTITY	RATE (KES)	COST (KES)
	SUBGARDE -300MM	-			
1	Density moisture content relation (2.5Kg rammer)	N°	4	1,200.00	4,800.00
2	Determination of natural moisture	N°	4	500.00	2,000.00
3	Determination of Atterberg limits	N°	4	1,500.00	6,000.00
4	Sieve analysis particle-Size Analysis of soils	N°	4	900.00	3,600.00
5	Field density Test (Sand replacement Method) every 30m interval	N°	20	3,500.00	70,000.00
6	CBR neat 4 days soak	N°	4	2,500.00	10,000.00
			Sub-Total		96,400.00
_	SUB BASE -200MM				
7	Density moisture content relation (4.5Kg rammer)		4	1,500.00	6,000.00
8	Determination of natural moisture		4	500.00	2,000.00
9	Determination of Atterberg limits		4	1,500.00	6,000.00
10	Sieve analysis particle-Size Analysis of soils		4	900.00	3,600.00
11	Field density Test (Sand replacement Method) every 30m interval		10	3,500.00	35,000.00
12	CBR neat 7 days soak		4	2,500.00	10,000.00
			Sub-Total		62,600.00
10	GCS -250MM				
13	Vibratory Hammer VH		4	2,500.00	10,000.00
14	Determination of natural moisture	N°	4	500.00	2,000.00
15	Sieve analysis particle-Size Analysis of aggregates	N°	4	900.00	3,600.00
16	UCS	N°	4	3,000.00	12,000.00
17	Field density Test (Sand replacemet method)	N°	10	3,500.00	35,000.00
			Sub-Total	,	62,600.00
	DBM -150MM				

Item 1.01A – Allow a Sum for quality control material testing by the Material Testing and Research Division (MTRD) of the Ministry of Roads and Transport against receipts

Image: second	18	Mix Design (Ministry Lab MTRD)	Item	1				
10^{-1} <					50,000.00	50,00	0.00	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	19	Core cuting			5,000.00	40,000.00		
Image: constraint of the second se	20	Core test	N°	8	2,500.00	20,00		
22 Bitumen extraction (centrifuge) N° 4 2,500.00 10,000.00 23 Vibratory Hammer N° 4 2,000.00 8,000.00 24 Marshal test N° 4 2,000.00 8,000.00 25 Refusal density N° 4 2,000.00 8,000.00 25 Refusal density N° 4 2,500.00 10,000.00 26 Mix Design (Ministry Lab MTRD) Item 1 60,000.00 60,000.00 27 Core cutting N° 8 5,000.00 40,000.00 28 Core test N° 8 2,500.00 20,000.00 29 Marshal test N° 4 2,000.00 8,000.00 29 Marshal test N° 4 128,000.00 128,000.00 30 Compressive strength test N° 350 500.00 175,000.00 31 Bend test N° 6 50,000.00 300,000.00 33 Ultrasonic	21	GMM	N°	4	1,500.00	6,000	.00	
23 Vibratory Hammer N° 4 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 8,000.00 2,000.00 10,000.00 0 0,000.00 <th< td=""><td>22</td><td>Bitumen extraction (centrifuge)</td><td>N°</td><td>4</td><td></td><td></td><td></td></th<>	22	Bitumen extraction (centrifuge)	N°	4				
24 Marshal test N° 4 2,000.00 8,000.00 25 Refusal density N° 4 2,500.00 10,000.00 25 Refusal density N° 4 2,500.00 10,000.00 26 Mix Design (Ministry Lab MTRD) Item 1 60,000.00 60,000.00 26 Mix Design (Ministry Lab MTRD) Item 1 60,000.00 60,000.00 27 Core cutting N° 8 5,000.00 40,000.00 28 Core test N° 8 2,500.00 20,000.00 29 Marshal test N° 4 2,000.00 8,000.00 29 CONCRETE WORKS Image: Concrete WORKS	23	Vibratory Hammer	N°	4				
25 Refusal density N° 4 2,500.00 10,000.00 ASPHALTIC CONCRETE AC- 50MM Sub-Total 152,000.00 60,000.00 26 Mix Design (Ministry Lab MTRD) Item 1 60,000.00 60,000.00 27 Core cutting N° 8 5,000.00 40,000.00 28 Core test N° 8 2,500.00 20,000.00 29 Marshal test N° 4 2,000.00 8,000.00 29 Compressive strength test N° 4 2,000.00 128,000.00 CONCRETE WORKS Image: State	24	Marshal test	N°	4				
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26 Mix Design (Ministry Lab MTRD) Item 1 $60,000.00$ $60,000.00$ 27 Core cutting N° 8 $5,000.00$ $40,000.00$ 28 Core test N° 8 $2,500.00$ $20,000.00$ 29 Marshal test N° 4 $2,000.00$ $8,000.00$ 29 Marshal test N° 4 $2,000.00$ $8,000.00$ CONCRETE WORKS Sub-Total 128,000.00 128,000.00 30 Compressive strength test N° 350 500.00 175,000.00 31 Bend test N° 6 50,000.00 300,000.00 32 Hardness test N° 6 50,000.00 300,000.00						102,0		
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				Sub-Total	· · · · · · · ·			
30 Compressive strength test N° 350 500.00 $175,000.00$ 30 Sub-Total $175,000.00$ $175,000.00$ $175,000.00$ STEEL WORKS $175,000.00$ $175,000.00$ $175,000.00$ 31 Bend test N° 6 $50,000.00$ $300,000.00$ 32 Hardness test N° 6 $50,000.00$ $300,000.00$ 33 Ultrasonic test N° 6 $50,000.00$ $300,000.00$		CONCRETE WORKS				128,0	00.00	
Sub-Total $175,000.00$ STEEL WORKS 175,000.00 31 Bend test N° 6 32 Hardness test N° 6 50,000.00 33 Ultrasonic test N° 6 50,000.00	30		N°	350	500.00	175.0		
STEEL WORKS N° 6 50,000.00 300,000.00 31 Bend test N° 6 50,000.00 300,000.00 32 Hardness test N° 6 50,000.00 300,000.00 33 Ultrasonic test N° 6 6 50,000.00 300,000.00				Sub-Total	500.00			
31 Bend test N° 6 50,000.00 300,000.00 32 Hardness test N° 6 50,000.00 300,000.00 33 Ultrasonic test N° 6 50,000.00 300,000.00		STEEL WORKS				175,0	00.00	
32 Hardness test N° 6 50,000.00 300,000.00 33 Ultrasonic test N° 6 50,000.00 300,000.00	31		N°	6				
33 Ultrasonic test N° 6 50,000.00 300,000.00					50,000.00	300,0	00.00	
					50,000.00	300,0	00.00	
					50,000.00	300,000.00		
34 Tensile Test N° 6 50,000.00 300,000.00					50,000.00	300,000.00		
35 Elongation Test N° 6 50,000.00 300,000.00			N°	6	50,000.00			
36 Bearing Test								
					5,000.00		5,000.00	
	b	-			5,000.00		5,000.00	
	с	Shear test	N°		5,000.00		5,000.00	
Sub-Total 1,515,000.00				Sub-Total		1,515	,000.00	
WAGES		WAGES						

37	Material Engineer	18		
			33,600.00	604,800.00
38	Materials Technologist	18		
			18,900.00	340,200.00
		Sub-Total		
				945,000.00
	Total Laboratory tests	Grand Total 3,136,60		3,136,600

Item 1.06 - Allow a sum for the Engineer's miscellaneous account to be spent in whole or part as instructed by the Resident Engineer and to be reimbursed against receipts as per Appendix A

Item	Description	Projected Amount Per Month (KES)	Time to Completion (18 Months)	Projected Amount (KES)
1	Stationery	15,000.00	18	270,000.00
2	Toiletries	15,000.00	18	270,000.00
3	Site Meeting Expenses & Snacks	100,000.00	18	1,800,000.00
4	Petty Cash	50,000.00	18	900,000.00
5.	Staff Airtime	50,000.00	18	900,000.00
	TOTAL			4,140,000.00

Item 1.09 A- Provide a prime cost sum for the reimbursement to the Contractor for payment of Engineer's support staff and allowance as in accordance with clause 137 of the special specifications

ITEM	POSITION	UNIT	QTY	RATE	TOTAL AMOUNT (KES)
1	Resident Engineer (Field Allowances)	Man- Months	18.00	91,000.00	1,638,000.00
2	Assistant Engineer	Man- Months	18.00	117,500.00	2,115,000.00
3	Surveyor	Man- Months	18.00	117,500.00	2,115,000.00
4	2No. Chainmen	Man- Months	36.00	36,500.00	1,314,000.00
5	Project Inspector/Superintendent	Man- Months	18.00	93,500.00	1,683,000.00
6	Materials Technologist	Man- Months	18.00	93,500.00	1,683,000.00
7	Lab Technician	Man- Months	18.00	71,500.00	1,287,000.00
8	Secretary	Man- Months	18.00	67,500.00	1,215,000.00
	TOTAL				13,050,000.00

SECTION VII: STANDARD SPECIFICATIONS

Standard Specifications refers to the Standard Specifications for Road and Bridge Construction, 1986 Edition.

Standard Specifications will apply for any works or processes not specified in the Special Specifications.

SECTION VIII: SPECIAL SPECIFICATIONS

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1. SECTION 1 – GENERAL

101 SPECIAL SPECIFICATIONS

Special specification is supplementary to the Standard Specifications and the two must be read in conjunction. In any case where there appears to be conflict between the two then the Special Specifications will take precedence.

In the absence of any definite provisions on any particular issue in the aforesaid Specifications, reference may be made to the latest codes and specifications of Design Manual for Roads and Bridges of the Ministry of Transport and communication of the Republic of Kenya, Kenya Bureau of Standards (KEBS), BS, ASTM, AASHTO and in that order. Where even these are silent, the construction and completion of the works shall conform to sound engineering practice as approved by the Engineer and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer shall be final and binding on the Contractor.

Where reference is made in the Contract to specific standards codes to be met by the materials, plant, and other supplies to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards as on the date of the bid and codes/design manual in effect shall apply, unless otherwise expressly stated in the contract. Where such standards and codes/design manual are national, or relate to a particular country or region, other internationally recognized standards which ensure a substantially equal or higher performance than the standards and codes/design manual specified will be accepted subject to the Engineer's prior review and written approval. The difference between the standards specified and the proposed alternative standards must be fully described in writing by the Contractor and submitted to the Engineer at least 28 days prior to the date when the Contractor desires the Engineer's approval. In the event that the Engineer determines that such proposed deviations do not ensure substantially equal performance, the Contractor shall comply with the standards specified in the documents.

When the term "Period of Maintenance" has been used in the Standard Specifications, it shall be changed to "Defects Liability Period".

102 LOCATION OF CONTRACT

The works comprise of construction a footbridge at Kihunguro across the Thika Superhighway (S1) Road.

102 EXTENT OF CONTRACT

The Works specified under this Contract shall include all general and ancillary Works and Work of any nature that is deemed necessary for the due and satisfactory construction, completion and maintenance of the Works to the full extent and meaning of the Drawings and Specifications, whilst complying with all Provisions of the Conditions of Contract whether specifically mentioned or not in the clauses of the Specification.

Scope of Works

The Major Works to be executed under the Contract comprise mainly of but are not limited to the following:

- i. Facilitation of the Supervision Staff
- ii. Site Clearance
- iii. Construction of a Footbridge.
- iv. Installation of pedestrian railings.
- v. Installation of electrical fixtures and Fittings
- vi. Maintenance of passage of traffic
- vii. Installation of Road Furniture
- viii. Removal of existing traffic calming measures
- ix. Maintenance of works during construction and 12 months defects liability period.

Any other activity not listed above but deemed to be necessary by the Engineer shall be carried out subject to Engineer's formal instructions and within the mode of payment stipulated either by day works or on measured basis.

103 CONTRACT DRAWINGS

Contract drawings have been bound in a book of drawings accompanying these Contract Documents as a separate volume. Additional copies of these drawings that may be required by the Contractor can be obtained from the Engineer; in which case the Contractor will be required to reimburse the cost of producing such additional copies.

The Engineer may from time to time, in order to enable the satisfactory completion of the works, revise, amend or supersede any of these drawings. It shall be the Contractor's responsibility to construct all works in conformity with the latest revision, amendment or superseding drawings, provided that the Engineer has given to the Contractor in writing such reasonable prior notices of intention to revise, amend or supersede as the nature of the intended change requires, and the relevant drawings have been issued to the Contractor.

The changed drawings shall entitle the Contractor such reasonable additional payments as provided for in the Contract, including any abortive work carried out by the Contractor prior to notice of intent to undertake changes having been given.

The Contractor may be required to demolish, alter and/or correctly rebuild at his own expense any part of the Works not in conformity with the current drawings issued to him within a reasonable prior notice.

The drawings for the project are contained in the following:

1. BOOK OF DRAWINGS

Three types of drawings shall be distinguished: Contract drawings; Shop or Erection drawings and As-Constructed drawings as described here under:

(a) Contract Drawings

- i. Contract drawings are drawings that form part of the Contract Documents and are hereby referred to as Drawings. These are base or fundamental drawings that originate from the Engineer or his Representative and express the intention, general form, serviceability and strength of the final element, component, product or structure. They should be read together with the Specifications comprising Standard and Special Specifications.
- ii. Errors: The Contractor shall verify and be responsible for the correctness of all dimensions other than the principal controlling dimensions shown on the Drawings, and shall call to the attention of the Engineer any errors or discrepancies that may be discovered. The Contractor shall have no claim for damages that may result from following an error, except for an error in the principal controlling dimensions or material properties shown on the Drawings or listed in the specifications.

(b) As-Constructed Drawings

- a) Definition: As-Constructed drawings shall be drawings showing the final details of the element, component or bridge as constructed.
- b) As part of preparation of As-constructed drawings, at the completion of each structure on the contract, the contractor shall submit to the Engineer one set of reduced prints of the corrected original tracings of all working drawings. Reduced prints of drawings that are common to more than one structural member is required to be submitted for each member. The first drawing of each reduced plan set shall contain an index. The index sheet shall be prepared specifically for the set of drawings and list sheet numbers and titles for each structure. Reduced prints for each structure shall be arranged in order of drawing numbers shown on the index.
- c) The Engineer shall review the drawings so prepared by the Contractor for accuracy and use them for prepare the As-Constructed drawings. The Drawings shall include and brief notes on construction methodology that may be considered useful for maintenance or monitoring. They may also include any special maintenance required or specified by the equipment manufacturers. On completion of the contract, the drawings prepared and filed in appropriate format shall be submitted to the Engineer as part of Project Closure documents for record.

104 PROGRAMME OF EXECUTION OF THE WORKS

Modify Clause 104 to read as follows:

The Contractor shall provide the works programme required under Clause 14 of Conditions of Contract within twenty-eight (28) days of receipt of the Engineer's order to commence work. The programme shall be in the form of a computerized critical path method, and shall be updated every two months to reflect all the circumstances affecting the progress of the works at that time. MS Project software or equivalent will be preferred.

The programme shall take into account all climatic and any other adverse conditions and ensure that the works are completed in the order and within the time specified.

The Contractor shall carry out the works in accordance with the programme agreed with the Engineer, but he shall in no manner be relieved by the Engineer's approval of the programme, to complete the works in the prescribed order and by the prescribed date. He shall continuously review his progress and make such amendments to his production rate as may be necessary to complete all of the works by the Contract Completion date.

105 ORDER OF EXECUTION OF WORKS

In addition to Section 105 of the Standard Specification, the Contractor shall carry out the Works such that a continuous and consecutive output of fully completed work is achieved.

106 SUBMISSION TO THE ENGINEER: WORKMANSHIP AND QUALITY CONTROL

The Contractor shall, not later than 4 weeks after the notice to commence the Works, submit a project specific Quality Management System, including the Work Method Statements and Quality Audit for major items of work, showing how all the Contractor's systems will ensure that all the works will conform to the Contract documents. The onus rests with the Contractor to produce work which conforms in quality and accuracy of detail to all the requirements of the Specifications and Drawings, and the Contractor shall, at his/her own expense, institute a quality control system and provide experienced engineers, foremen, surveyors, materials technicians, other technicians and other technical staff, together with all transport, instruments and equipment, to ensure adequate supervision and positive control of the Works at all times. The Contractor shall provide chainmen and labourers as necessary for the Engineer to carry out checks on the Works.

The Contractor shall conduct tests or have them conducted continually on a regular basis, to check the properties of natural materials and processed natural materials and of products manufactured on the site, such as concrete and asphalt. The Contractor shall remain fully responsible for any defective material or equipment provided by him. Similarly, the quality of all elements of the Works shall be checked on a regular basis so as to ensure compliance with the specified requirements.

The intensity of control and of tests to be conducted by the Contractor in terms of these obligations shall be adequate to ensure that proper control is being exercised.

Where any natural materials or products made from natural materials are supplied, and upon completion of each element of the construction work, the Contractor shall test and check such materials, products and/or elements for compliance with the specified requirements and shall submit his results to the Engineer for approval. Such submission shall include all his measurements and test results and shall furnish adequate proof of compliance with the specified requirements.

No specific pay items are provided as compensation for the above obligations, including the provision of all samples delivered to the Engineer, the repair of places from which samples were taken, and the provision of the necessary personnel and testing apparatus and facilities, for which compensation shall be included in the bid rates of the Contractor for the various items of work to which these obligations apply.

The Contractor shall submit to the Engineer for examination, the results of all relevant tests, measurements and levels indicating compliance with the Specifications on completion of every part of the Work.

107CERTIFICATE OF SUBSTANTIAL COMPLETION

The minimum length of road for which a certificate will be issued shall be the whole of the project road lengths comprised in the lot when substantially completed.

The restoration of borrow pits and quarries is subject to the restoration requirements of Section 6 of these Specifications.

108METHOD OF CONSTRUCTION

The Engineer's normal working hours shall be 8 hours from Monday to Friday and 5 hours on Saturday with Sunday set aside for rest.

If the Contractor wishes to execute permanent works outside these hours, he shall meet any extra costs arising thereof in addition to giving a day's notice in writing.

109 NOTICE OF OPERATIONS

Add the following sub- Clause.

Notification Terms

It shall be the Contractor's responsibility to notify the Engineer when any item of works scheduled are completed and ready for approval, and the Contractor shall give sufficient notice to allow control test to be performed.

117 HEALTH, SAFETY, AND ACCIDENTS

Add to sub-clause 19.1 the following:

In addition to providing, equipping and maintaining adequate first aid stations throughout the works in accordance with the Laws of Kenya, the Contractor shall provide and maintain on site during the duration of the Contract, a fully equipped dispensary. This shall be with a qualified Clinical Officer / Nurse who shall offer the necessary medical advice on HIV and related diseases to the Engineer's and Contractor's Site staff. The Contractor shall allow for this in the rates and be responsible for all site welfare arrangements at his own cost.

119 USE OF EXPLOSIVES

Add to clause 119 Explosive and Blasting

The requirements of the Laws of Kenya governing explosives and other requirements and regulations of Government of Kenya and other authorities shall be complied with.

No explosives of any kind shall be used without prior written consent of the Engineer.

The Contractor shall be solely responsible for the provision, handling, and storage and transporting of all explosives, ancillary materials and all other items of related kind whatsoever required for blasting.

120PROTECTION OF EXISTING WORKS AND SERVICES

a) The Contractor shall acquaint himself with the position of all existing services such as sewers, water drains, cables for electricity and telephone, lighting and telephone poles, water mains, etc., before commencing any excavation or other work likely to affect the existing services.

The cost of all plant, equipment and materials, labour, technical and professional staff, transport and the like necessary for determining the locations of existing services, including the making good of any damage caused to such services all to the satisfaction of the Engineer, shall be deemed to be included in the tender rates. No other payment shall be made for the costs of such operations or for the making good of damage caused thereby to the existing services.

b) The Contractor shall be held responsible for injury to existing structures, works or services and shall indemnify and keep indemnified the Employer against any claims in this respect (including consequential damages).

121 DIVERSION OF SERVICES

The Contractor shall acquaint himself with the location of all existing services such as telephone lines, electricity cables, water pipes, sewers etc., before execution of any works that may affect the services. The cost of determining the location of the existing services together with making good or repairing of any damage caused all to the satisfaction of the Engineer shall be included in the tender rates.

Subject to the agreement with the Engineer, the Contractor shall be responsible for removal of alteration and relocation of existing services.

The Contractor shall indemnify the Employer against claims originating from damage to existing services or works.

123 LIAISONS WITH GOVERNMENT AND POLICE OFFICIALS

The Contractor shall keep in close touch with the Police and the other Government officials of the area regarding their requirements in the control of traffic or other matters, and shall provide all assistance or facilities, which may be required by such officials in the execution of their duties.

124 LAND FOR ALL CAMPS SITES AND FOR THE CONTRACTOR'S OWN PURPOSES, INCLUDING TEMPORARY WORKS

Notwithstanding Clause 124 of the Standard Specification all requirements of land for temporary works and construction purposes shall be to the approval of the Engineer but the Contractor will make all necessary arrangements with the property owners concerned and pay all charges arising thereon. On or before completion of the Contract, the Contractor shall remove all temporary works and shall restore all such land to the condition in which it was immediately prior to the occupation thereof as far as is reasonable and practicable. No separate payment will be made to the Contractor on account of these items and the Contractor must make due allowance for them in his rates.

Notwithstanding Clause 120 of the Standard Specifications, the Contractor shall be required to appoint a competent surveyor who will liaise with the Engineer on matters related to the demarcation of the existing road reserve, site measurements, removal, and reinstatement of existing services.

126 MATERIALS AND MANUFACTURED GOODS

Notwithstanding the provisions of Clause 126 of the Standard Specification, the Contractor's attention is drawn to his obligations with regard to quality and delivery schedule of materials and goods obtained from suppliers. Should the Engineer at any time be dissatisfied with any goods and materials intended for use by the Contractor upon the Works, he shall be empowered to reject the goods and materials and shall order that others of acceptable quality replace them. Any more work that may consequently have to be redone and the costs of the new supplies shall be borne by the Contractor.

127INFORMATION FROM EXPLANATORY BORING AND TEST PITS

Omit the content of Clause 127 and substitute the following Sub-Clauses: -

127.1 Factual Materials Report

The Factual Materials Report for this Contract does not form part of the Contract Documents. However, the Report will be made available for the Contractor's information only, and any conclusions on issues such as suitability of materials, location of borrow pits, material quantities etc., made by the Contractor on the basis of the Factual Materials Report, will be at his own risk.

127.2 Trial Sections

The Contractor shall allow in his programme for constructing trial sections and carrying out tests upon them as directed by the Engineer. Trials would normally be required at the start of each pavement layer and if changes of materials, method, or equipment deem it necessary, as directed by the Engineer. The time for completion of the Contract shall not be extended because of the time needed to construct trial sections and evaluate the tests on them.

At least fourteen days before the work of laying any pavement layer is commenced, the contractor shall construct trial sections of at least 100 m in length and to the full construction width and the specified pavement layer thickness. For each trial section, the Contractor shall use the materials, mix proportions, mixing, laying, compaction equipment and construction procedure that he proposes to use for the main work. The main work of laying the pavement layer shall not be commenced until this trial has been tested and approved by the Engineer.

No variation in the construction procedure, mix proportions, size, grading or source of any of the constituents shall be made without the agreement of the Engineer who may first require new trial sections to be carried out.

Trial sections, if found satisfactory, will be paid for under the rates in the Bill of Quantities for the appropriate items, as if the trial sections were part of the normal work. No separate payment will be made for trial sections and testing and the Contractor shall be deemed to have provided for this in his rates.

The Contractor shall make good, at his own expense; any trial sections that fail to meet the specified standards. The standards shall include, but not be limited to, material quality, layer thickness, levels and compaction.

128 STORAGE OF MATERIALS

All materials shall be stored on Site in a manner approved by the Engineer and the Contractor shall carefully protect from the weather all work and materials which may be affected thereby.

129 TEST CERTIFICATES

When instructed by the Engineer the Contractor shall submit certificates of test from the suppliers of materials and goods required in connection with the works as the Engineer may require.

Such certificates shall certify that the materials or goods concerned have been tested in accordance with the requirements of the specifications and shall give the results of all the tests carried out. The Contractor shall provide adequate means of identifying the materials and goods delivered to the site with the corresponding certificates.

130 PROGRESS PHOTOGRAPHS

Notwithstanding the provision of Clause 130 of the Standard Specifications, the Contractor shall not be responsible for taking of progress photographs. Progress Photographs shall be taken by the Engineer's Representative and relevant costs charged to the Contractor who will be reimbursed under Miscellaneous Accounts.

131 SIGNBOARDS

Delete paragraph 1 of item 131 of the Standard Specification and replace it with the following:

The Contractor shall provide and erect two (2) project signboards on the site as directed. The minimum dimensions of the boards shall be as shown in the Drawings and as directed by the Engineer. The boards shall be prepared primed and painted cream and lettered in black. The boards shall be of weatherproof construction and be able to withstand any wind conditions prevailing in the area.

133 ENGINEERS OFFICE

The Contractor may be instructed by the Engineer under clause 58 of the General Conditions of Contract to make payments of general receipted accounts for such items as stationery, stores, furniture and equipment, claims and allowances for supervision personnel and any miscellaneous claims or the Engineer may direct the Contractor to purchase or pay for the above. The Contractor will, on provision of receipts, be paid under Bills of quantities No. 1.

The Contractor, when instructed, shall provide and install at the Engineer's office the Equipment specified below:

Mobile Phones - 3No. Specifications

<u>Technology</u>	<u>GSM / CDMA / HSPA / EVDO / LTE / 5G</u>
Dimensions	163.4 x 78.1 x 8.9 mm (6.43 x 3.07 x 0.35 in)
<u>Weight</u>	234 g (8.25 oz)
Build	Glass front (Gorilla Glass Victus 2), glass back (Gorilla Glass Victus 2), aluminum frame
<u>SIM</u>	Nano-SIM and eSIM or Dual SIM (2 Nano-SIMs and eSIM, dual stand-by)
	IP68 dust/water resistant (up to 1.5m for 30 min)
	Armor aluminum frame with tougher drop and scratch resistance (advertised)
	Stylus (Bluetooth integration, accelerometer, gyro)

<u>Type</u>	Dynamic AMOLED 2X, 120Hz, HDR10+, 1200 nits (HBM), 1750 nits (peak)
Size	6.8 inches, 114.7 cm ² (~89.9% screen-to-body ratio)
Resolution	1440 x 3088 pixels, 19.3:9 ratio (~500 ppi density)
Protection	Corning Gorilla Glass Victus 2
	Always-on display
<u>OS</u>	Android 13, One UI 5.1
<u>Chipset</u>	Qualcomm SM8550-AC Snapdragon 8 Gen 2 (4 nm)
<u>CPU</u>	Octa-core (1x3.36 GHz Cortex-X3 & 2x2.8 GHz Cortex-A715 & 2x2.8 GHz Cortex-A710 & 3x2.0 GHz Cortex-A510)
<u>GPU</u>	Adreno 740
Card slot	No
Internal	512GB 12GB RAM
	UFS 4.0
	200 MP, f/1.7, 24mm (wide), 1/1.3", 0.6µm, multi-directional PDAF, Laser AF, OIS
Oral	10 MP, f/4.9, 230mm (periscope telephoto), 1/3.52", 1.12µm, Dual Pixel PDAF, OIS, 10x optical zoom
Quad	10 MP, f/2.4, 70mm (telephoto), 1/3.52", 1.12 μ m, Dual Pixel PDAF, OIS, 3x optical zoom
	12 MP, f/2.2, 13mm, 120° (ultrawide), 1/2.55", 1.4μm, Dual Pixel PDAF, Super Steady video
Features	LED flash, auto-HDR, panorama
<u>Video</u>	8K@24/30fps, 4K@30/60fps, 1080p@30/60/240fps, 1080p@960fps, HDR10+, stereo sound rec., gyro-EIS
<u>Single</u>	12 MP, f/2.2, 26mm (wide), Dual Pixel PDAF
Features	Dual video call, Auto-HDR, HDR10+
<u>Video</u>	4K@30/60fps, 1080p@30fps
Loudspeaker	Yes, with stereo speakers
<u>3.5mm jack</u>	No
	32-bit/384kHz audio
WI AN	Tuned by AKG Wi Fi 802 11 a/b/g/n/ac/6e, tri hand. Wi Fi Direct
WLAN Bluetooth	Wi-Fi 802.11 a/b/g/n/ac/6e, tri-band, Wi-Fi Direct 5.3, A2DP, LE
Positioning	GPS, GLONASS, BDS, GALILEO
<u>NFC</u>	Yes
Radio	No
USB	USB Type-C 3.2, OTG
	Fingerprint (under display, ultrasonic), accelerometer, gyro, proximity,
Sensors	compass, barometer

<u>Type</u>	Li-Ion 5000 mAh, non-removable
<u>Charging</u>	45W wired, PD3.0, 65% in 30 min (advertised)15W wireless (Qi/PMA)4.5W reverse wireless
<u>Colors</u>	Phantom Black, Green, Cream, Graphite, Sky Blue, Red,
SAR	1.12 W/kg (head) 0.92 W/kg (body)
SAR EU	0.96 W/kg (head) 1.40 W/kg (body)
	AnTuTu: 1241531 (v9)
Performance	GeekBench: 4927 (v5.1)
	GFXBench: 67fps (ES 3.1 onscreen)
<u>Display</u>	Contrast ratio: Infinite (nominal)
<u>Camera</u>	Photo / Video
Loudspeaker	-25.6 LUFS (Very good)
Battery life	Endurance rating 126h

134 ENGINEER'S LABORATORY AND SURVEY EQUIPMENT

The Contractor may be instructed by the Engineer under the said Clause to make payments of receipted accounts for such items as testing of materials in an approved laboratory, purchase of survey equipment or as directed by the Engineer.

Any delays to the Contractor or the Contractor's activities caused by the Engineer being unable to perform survey work, field or laboratory tests due to the Contractor's failure to supply the said equipment or make such payments shall be deemed to have been caused entirely by the Contractor's own actions, and any consequences of such delays shall be interpreted as such.

The payment to comply with this requirement is provided in the Bill of Quantities and ownership of all equipment shall revert to the Employer after the completion of the Works.

Failure by the Contractor to supply the equipment or make such instructed payments shall make him responsible to bear all costs that may be incurred as a result of the Engineer's staff using alternative means of communication, including delays in supervision and approval of Works by the Engineer.

137 ATTENDANCE UPON THE ENGINEER AND HIS STAFF

The Contractor shall pay wages (including all overtime) and house all attendant staff to fulfil the requirements of Clause 137 of the Standard Specification. The number of staff required for these duties shall be about:

- (1 No.) Assistant Engineer
 - i. Holds a Degree in Civil Engineering or its equivalent from an institution recognized by EBK.
 - ii. Registered Graduate Civil Engineer with EBK.
 - iii. Has over 3 years Post-Registration Experience in Roads and Structures.
- (1 No.) Surveyor
 - i. Holds a Degree in Survey or its equivalent.
 - ii. Registered as a Graduate Member with the Institute of Survey of Kenya
 - iii. Has over 3 Years of Practical Experience in Roads.

- (1 No.) Inspector
 - i. Holds a Diploma in Civil Engineering Highways Category.
 - ii. Has over 5 Years Post Graduation Practical Experience in Roads.
- (1 No.) Assistant Inspector
 - iii. Holds a Diploma in Civil Engineering Highways Category.
 - iv. Has over 2 Years Post Graduation Practical Experience in Roads.
- (1 No.) Lab Technician
 - i. Holds a Diploma in Civil or its equivalent.
 - ii. Has over 5 Years of Practical Experience in Roads and material testing.
- (1 No.) Assistant Lab Technician
 - iii. Holds a Diploma in Civil or its equivalent.
 - iv. Has over 2 Years of Practical Experience in Roads and material testing.
- (1 No.) Office Assistants
 - i. Has O-Level Certificate or its equivalent.
 - ii. Trained on data keeping and/or computer applications.
- (2 No.) Chainmen.
 - i. Has over 1 year of practical experience in roads survey

And any other staff as may be deemed necessary by the Engineer, including the Employer's Project Implementation Team. They shall be reimbursed under the **item 1.09** of the Bill of Quantities.

138 VEHICLES AND DRIVERS FOR THE ENGINEER AND HIS STAFF AND METHOD OF PAYMENT

The Contractor shall when instructed to do so provide and maintain in good working condition for the exclusive use of the Employer, his representatives and his appointed assistants throughout the contract:

- a) One (1) turbo charged (odometer reading 0 40,000Km) diesel propelled four-wheel drive Double Cabin pick-up of minimum engine capacity of 2800cc fitted with fog lights, side step, 17 x 7.5" alloy wheels, DVD changer, back guide monitor, front parking sensors, 12 speaker audio system, rear wiper, passenger and driver's knee and side air bag system, shield airbags, active head rest, head lamp cleaning system, 3-zone climate control air conditioning, smart entry and start, audio input with USB and iPod control, full spare wheel and cover, towing capacity 2,500kg braked, roof rails, rear view reverse camera, ABS, leather premium seats and door trim, door mirror with turn lamp and auto free hubs for the exclusive use of the Engineer.
- b) One (1) odometer reading 0 40,000Km turbo charged diesel propelled 4WD 5 door 7 seater utility station wagon vehicles of minimum engine capacity 3000cc fitted with fog lights, side step, 17 x 7.5" alloy wheels, DVD changer, back guide monitor, front parking sensors, 12 speaker audio system, rear wiper, passenger and driver's knee and side air bag system, shield airbags, active head rest, head lamp cleaning system, 3-zone climate control air conditioning, smart entry and start, audio input with USB and iPod control, full spare wheel and cover, towing capacity 2,500kg braked, roof rails, rear view reverse camera, ABS, leather premium seats and door trim, door mirror with turn lamp and auto free hubs for the exclusive use of the Engineer.

All the pickups shall be fitted with fibre grass covering to the approval of the Engineer.

The Contractor shall insure comprehensively the vehicles for any licensed drivers and shall

provide competent drivers during normal working hours and whenever required by the Engineer.

Should any vehicle supplied not be in road worthy condition, the Contractor shall provide an acceptable equivalent replacement vehicle until such time as the original vehicle is repaired to the satisfaction of the Engineer and returned for use.

Payment for the vehicles (up to 4,000Km.), shall be by vehicle months. Payment for mileage above 4,000Km shall be made at a rate per Kilometre. These payments shall be inclusive of all fuels, lubricants, servicing, insurance, maintenance, drivers and repairs. The rate shall include any overtime the drivers might be due or any other allowances in addition to the normal working hours. Payment shall be made under appropriate items in the Bills of Quantities.

The vehicles shall revert to the Contractor at the end of the contract.

139 RECEIPTED ACCOUNTS

The Contractor maybe instructed by the Employer's representative or his appointed assistants to make payments of general miscellaneous accounts for such items as stationery, stores and equipment and miscellaneous supervision personnel and claims or the Employer's representative may direct the Contractor to purchase or pay for the above. The Contractor will be paid on a prime cost basis.

All the houses and furniture mentioned above shall revert to the Contractor after the completion of the contract. Payments shall be made under the relevant provisions under the Bills of Quantities.

142 ENVIRONMENTAL PROTECTION

The Contractor shall comply with the Statutory Regulations in force in Kenya regarding Environmental protection and waste disposal, and shall liaise with the National Environmental Management Agency (NEMA).

Within four (4) weeks after receipt of the order to commence work, the Contractor shall prepare and submit a specific Environmental Management Plan for the project and his operations relating to the approved Environmental Impact Assessment. The Environmental Management Plan shall outline potential environmental hazards and risks, and provide an action plan to deal with the hazards, minimize the risks, and mitigate adverse environmental impacts, and include a general decommissioning plan covering all relevant aspects of the project. The Environmental Management Plan shall identify monitoring indicators and reporting requirements.

The Contractor shall be required to keep daily reports detailing all ongoing monitoring and surveillance activities and submit monthly environmental progress reports to the Engineer. The Contractor shall keep permanent records of all environmental activities, noncompliance events such as but not limited to oil spills, remedial action taken, and photographs and shall allow access to these records for the Engineer and NEMA Inspectors. The Contractor shall comply with any lawful instructions by NEMA Inspectors and shall act on these without delay.

The Contractor shall ensure as far as reasonably practicable and to the satisfaction of the Engineer; that the impact of the construction on the environment shall be kept to a minimum and that appropriate measures are taken to mitigate any adverse effects during the construction.

(a) The Contractor shall exercise the utmost care to preserve the natural landscape and shall

conduct his construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work. Except where clearing is required for permanent works, all trees, native shrubbery, and vegetation shall be preserved and protected from damage by the Contractor's construction operations and equipment. All unnecessary destruction, scarring, damage or defacing resulting from the Contractor's operations shall be repaired, replanted, reseeded or otherwise corrected as directed by the Engineer, and at the Contractor's expense.

- (b) The Contractor shall ensure that measures are in place to control soil erosion and water pollution, by making use of berms, dykes, silt fences, brush barriers, dams, sediment basins, filter mats, netting, gravel, mulches, grasses, slope drains, contour banks, and other erosion control devices and methods. Temporary erosion control provisions shall be coordinated with permanent erosion control features to assure economical, effective and continuous measures throughout the period of the works. The Contractor's attention is drawn to the requirements of Clause 502, in that works need to be progressively finished so that permanent vegetation can establish quickly to mitigate soil erosion and erosion of drains.
- (c) The Contractor shall provide all the labour, equipment, materials, and means required and shall carry out proper and efficient measures wherever and as often as necessary to minimise the dust nuisance.
- (d) The Contractor shall comply with all applicable Kenyan laws, orders and regulations concerning the prevention, control and abatement of excessive noise. Blasting, use of jackhammers, pile driving, rock crushing, or any other activities producing high-intensity impact noise may be performed at night only if approved the Engineer.
- (e) Immediately after extraction of materials, all borrows pits shall be backfilled and reinstated to the satisfaction of the Engineer. In particular, borrow pits near the project road shall be backfilled in such a way that no water collects in them.
- (f) Spilling of bitumen, fuel, oil and other pollutants shall be reported, documented and cleaned up to the full satisfaction of the Engineer
- (g) The Contractor's attention is drawn to the requirements of the Standard Specification with regard to the environment and in particular to the following clauses:
 - Clause 115: Construction Generally
 - Clause 116: Protection from Water
 - Clause 136: Removal of Camps
 - Clause 605: Safety and Public Health Requirements
 - Clause 607: Site Clearance and Removal of Topsoil and Overburden
- (h) Where directed, the Contractor may be required to desilt and clean rivers and/or watercourses to ensure unimpeded flow.
- Payment in respect of this Item 142 is included as a PC Sum in the Bill of Quantities.
 Payment of this sum will be by equal monthly instalments over the period of the
 Contract excluding the Period of Maintenance. The total sum of the instalments shall not
 exceed the sum, allowed and payment of the monthly instalments will only be made for

that month if the Engineer is satisfied that the Contractor has fully complied with the requirements of Item 142, including his reporting obligations. Payment items for environmental protection during the maintenance period have been included in section 28.

Payment for 142 (h) (as shown above) will be paid for as day work and as directed by the Engineer.

2. SECTION 2 – MATERIALS AND TESTING OF MATERIALS

202 TESTING BY THE CONTRACTOR

Add the following:

202.1 Contractor's Testing

The provision of the Engineer's laboratory and testing equipment, as specified in Section 1 of this Special Specification, does not relieve the Contractor of his obligation to provide laboratory and testing equipment and execute his own testing, in conformity with the specified requirements in the Standard Specification.

204 SIEVES

In the standard sieve series, delete the size of the greater sieve "75"mm and replace by a "100" mm size.

205 SOILS AND GRAVEL

Whenever in the Contract Documents, a minimum California Bearing Ratio (CBR) is specified, the CBR of the material shall be determined at the specified degree of compaction.

- a) After four days soaking in the case of neat materials and,
- b) After seven days curing plus seven days soaking in the case of cement/lime improved materials.

207 In addition to the requirements of clause 207 of the standard specifications, Ordinary and Rapid setting Portland cement shall be sampled and tested in accordance with, and shall comply with the latest equivalent revised standards.

211BITUMINOUS BINDERS

a) Requirements

Straight run bitumen in addition to the requirements of the Standard Specification the ash content of penetration grade bitumen shall not exceed 0.5% by weight.

b) Types of Bitumen

Prime coat shall be type MC70 unless otherwise stated. Tack coat shall be K1-70 emulsion while binder for asphalt concrete shall be 60/70 pen grade bitumen.

224TRIAL SECTIONS

The Contractor shall allow in his programme for the construction of trial sections and carrying out tests upon them as directed by the Engineer. The time of completion of the contract shall not be extended because of the time taken to carry out tests and evaluate trial sections.

No variation in the construction procedure, mix proportions, spray or spread rates, size, grading or source of any constituents shall be made without the approval of the Engineer.

226 FREQUENCY OF TESTING

Add the following:

226.1 General Acceptance Criteria for Test Results

Conventional statistical techniques shall be used alongside the above said criteria (where applicable).

227 MEASUREMENT AND PAYMENT

No additional measurement and payment will be made for testing of materials, trials, etc., in conformity with the standard specification.

228 WORKMANSHIP AND QUALITY CONTROL

The Contractor shall, not later than 4 weeks after the notice to commence the Works, submit a project specific Quality Management System, including the Work Method Statements and Quality Audit for major items of work, showing how all the Contractor's systems will ensure that all the works will conform to the Contract documents. The onus rests with the Contractor to produce work which conforms in quality and accuracy of detail to all the requirements of the Specifications and Drawings, and the Contractor shall, at his own expense, institute a quality control system and provide experienced engineers, foremen, surveyors, materials technicians, other technicians and other technical staff, together with all transport, instruments and equipment, to ensure adequate supervision and positive control of the Works at all times. The Contractor shall provide chainmen and labourers as necessary for the Engineer to carry out checks on the Works.

The Contractor shall conduct tests or have them conducted continually on a regular basis, to check the properties of natural materials and processed natural materials and of products manufactured on the site, such as concrete and asphalt. The Contractor shall remain fully responsible for any defective material or equipment provided by him. Similarly, the quality of all elements of the Works shall be checked on a regular basis so as to ensure compliance with the specified requirements.

The intensity of control and of tests to be conducted by the Contractor in terms of these obligations shall be adequate to ensure that proper control is being exercised.

Where any natural materials or products made from natural materials are supplied, and upon completion of each element of the construction work, the Contractor shall test and check such materials, products and/or elements for compliance with the specified requirements and shall submit his results to the Engineer for approval. Such submission shall include all his measurements and test results and shall furnish adequate proof of compliance with the specified requirements.

No specific pay items are provided as compensation for the above obligations, including the provision of all samples delivered to the Engineer, the repair of places from which samples were taken, and the provision of the necessary personnel and testing apparatus and facilities, for which compensation shall be included in the bid rates of the Contractor for the various items of work to which these obligations apply. The Contractor shall submit to the Engineer for examination, the results of all relevant tests, measurements and levels indicating compliance with the Specifications on completion of every part of the Work.

3. SECTION 3 - SETTING OUT AND TOLERANCES

301SETTING OUT

Add the following to (a) General

If the traverse points to be used for the setting out are close to the existing carriageway and interfere with construction works, then the Contractor shall relocate them to a location where they will not be disturbed. The co-ordinates and heights of all traverse points so located shall be listed and provided to the Engineer for checking and/or approval. The Contractor shall also monument the new centreline every 200m along straight and all salient points along curves by a pin in the concrete beacon before commencement of any works.

The reference points to define the road reserve shall have 12 mm diameter steel pins embedded in concrete, 200 mm long with 25 mm exposed to the air, sticking out from its top surface. This pin shall be co-ordinated and heighted and the result of the same shall be provided to the Engineer for approval. The cost of these works shall be included in the Contractor's unit rates for other items, as no separate payment item has been provided in the Bill of Quantities.

Commencement of the Works shall not be permitted until this basic survey data has been provided and approved by the Engineer for at least 5 km of the road.

Add the following to (b) Detailed Setting Out

Reference pegs shall be 50 mm by 50 mm in section 600 mm long driven 400 mm firmly into the ground and painted white above the ground. The offset from centreline shall be indicated by a small nail 20 mm to 25 mm long with its head driven flush with the top of the peg. Chainages, offset and reference elevation shall be clearly indicated on the sides of the pegs to the satisfaction of the Engineer.

After cutting of benches and prior to commencement of earthworks or subgrade works, the Contractor shall take cross-sections again and submit the copy of the same to the Engineer for agreement. These cross-sections shall when agreed be used as the basis of measurement for all subsequent layers, unless otherwise stated.

302TOLERANCES

Add the following:

Pavement Widths

For Pavement widths for subbase, base and binder course, the allowable tolerances shall be -0 to +50 mm. (k) Pipe Culverts The maximum deviation from the specified line of a drainage pipe shall be: -

Horizontal - 20 mm in 3.0 m Vertical - 30 mm in 10.0 m

305AS BUILT DRAWINGS AND MAINTENANCE MANUALS

Prior to the issue of a Taking Over Certificate the Contractor shall provide three (3) electronic copies of as built drawings, and where appropriate, maintenance manuals showing the Works as constructed, and details of the correct operation and maintenance of ancillary Works. No separate payment shall be made for this requirement, and costs for compliance shall be deemed to be included in the Contractor's general rates and prices.

4. SECTION 4 - SITE CLEARANCE AND TOP SOIL STRIPPING

401SITE CLEARANCE

The Contractor's attention is drawn to the requirements of Clause 142 regarding preservation of existing trees and native shrubbery and vegetation, and environmental requirements generally.

Site clearance is to be confined within the road reserve, and site clearance is not required over the existing road. The remaining area required for construction purposes, including sides of existing embankments and cuttings shall be cleared as instructed by the Engineer. Generally, light clearance shall be done on areas covered by grass and light thickets while heavy clearance shall cover sections in dense bush.

Site clearance of areas necessary for the execution of the contract, outside the road reserve, and for quarries, borrow pits, stockpiles, spoil tips, haul roads and deviation roads, will be subject to the approval of the Engineer, but shall be the responsibility of the Contractor, and no separate payment will be made.

402REMOVAL OF TOPSOIL

Topsoil shall include removal of up to 200mm depth of any unsuitable material as directed by the Engineer.

403REMOVAL OF STRUCTURES, FENCES AND OBSTRUCTIONS

Items have been included in the Bill of Quantities for the removal of existing pipes, inlet and outlet structures for pipe and box culverts and existing concrete structures.

An item has been included in the Bill of Quantities for the removal of existing guardrail, transporting and stockpiling as directed by the Engineer.

When instructed by the Engineer, the Contractor shall demolish or remove other additional structures or obstructions.

Measurement and payment for removal of obstructions and structures shall be made against the quantities provided in Bill No.4 of the Bill of Quantities.

5. SECTION 5 – EARTHWORKS

501SCOPE OF SECTION

The scope of this section includes all earthworks associated with the Contract, including roadside amenities, service roads, walkways and any widenings

503 CLASSIFICATION OF MATERIAL

Add the following to (a) Hard material:

Hard materials include materials which require drilling and blasting to enable removal.

Add the following to (b) Soft material:

Unsuitable materials include:

- (i) All material containing more than 5% by weight of organic matter (such as topsoil, material from swamps, mud, logs, stumps and other perishable material)
- (ii) All material with a swell of more than 3%.
- (iii) All clay of plasticity index exceeding 45 or of liquid limit exceeding 70.
- (iv) All material having moisture content greater than 105% of optimum moisture content (AASHTO T99)

504PREPARATION PRIOR TO FORMING EMBANKMENT

Add the following at the end:

In cuttings, the contractor shall excavate to a level that would accommodate the 350mm subgrade and the existing ground below this MUST be processed and compacted in accordance with clause 504 of the standard specifications.

Where benching is required to existing pavement to accommodate earthworks, subgrade or subbase for widening the road, the rate for compaction of existing ground shall be deemed to cover this activity.

Excavation in the pavement of the existing road shall be kept dry. In the event of water penetrating the underlying layer, construction of the subsequent layers shall be postponed until the underlying layers are dry enough to accommodate the construction plant without deforming or otherwise showing distress.

Step construction shall be carried out per layer at the joint where excavating both vertically and perpendicular to the direction of the travel. The step shall be 500mm perpendicular to the direction of the travel and 150mm vertical unless otherwise instructed by the Engineer.

Special care shall be taken when compacting the new material at the joint ensuring that specified density is achieved.

505CONSTRUCTION OF EMBANKMENTS

Only material approved by the Engineer shall be used in embankments. Soft fill material shall comply with the following requirements:

- Organic matter less than 5% by weight
- CBR of not less than 10% for carriageway and Walkways measured after 4-day soak on a laboratory mix compacted to a dry density of 95% (AASHTO T 99)
- Swell less than 1% on the laboratory mixed sample.

Subgrade is defined on the Drawings, and subgrade material shall comply with the requirements of Clause 505 except that the CBR shall have a value of not less than 10% measured after a four (4) day soak on a laboratory mix compacted to a dry density of 95% MDD (AASHTO T99)

Improved subgrade layer is defined on the Drawings and shall comply with the following requirements:

- CBR of not less than 22.5% measured after 4day soak on a laboratory mix compacted to a dry density of 95% (AASHTO T 99)
- Plasticity Index less than 12%
- Swell less than 1% on the laboratory mix sample.
- Placed in two layers of 150mm thick

Subgrade shall mean the upper 350mm of earthworks, either in-situ or in fill and subgrade shall be provided as part of the earthwork operation, and payment shall be made as fill.

No extra payment will be made for haulage of suitable material from borrow pits as the overhaul costs shall be deemed to have been factored in the rates inserted in the Bills of Quantities

508COMPACTION OF EARTHWORKS

At pipe culverts, all fill above ground level around the culverts shall be compacted to density of 95% MDD (AASHTO T180) up to the level of the top of the pipes or top of the surround(s), if any and for a width equal to the internal diameter of the pipe on either side of the pipe(s) or surround(s) as applicable.

At locations adjacent to structures (up to 100m away from structure), all fill above ground level up to the underside of the subgrade shall be compacted to density of 95% MDD (AASHTO T180). In case of fill around box culverts this should be carried out for the full width of the fill and for a length bounded by the vertical plane passing through the ends of the wingwalls

Notwithstanding the provision of clause 503 of the standard Specification, Compaction of subgrade material (i.e. material immediately below formation) in cut areas shall not be carried out by the contractor in areas where the formation is formed in hard material, unless specific instructions to the contrary are issued by the Engineer

Where improved sub-grade material shall be required, the material shall have a CBR greater than 10% and this shall be compacted and finished to the same standards and tolerances as those required for normal subgrade and clauses in the specifications applying to normal subgrade shall also apply.

509MASS-HAUL DIAGRAM

Delete Clause 509 entirely and substitute "No Mass-Haul diagram has been provided with the Documents. The Contractor shall be responsible for locating suitable materials for constructing earthworks along the alignment and elsewhere and shall include in his rates for fill, spoil and for the cost of haulage".

510SPOIL MATERIAL

The Contractor's attention is drawn to the requirements of Section 6 of this Specification.

Where possible, spoil material is to be utilised in the backfill and restoration of borrow pits and quarry areas.

511BORROW PITS

Replace the first two paragraphs by the following:

Fill material which is required in addition to that provided by excavation shall be obtained from borrow pits to be located and provided by the Contractor and approved by the Engineer.

514TOPSOILING AND GRASSING

Top soiling and grassing shall be to all areas instructed by the Engineer. Top soiling and grassing of spoil, borrow, stockpile and quarry areas, including payment thereof, shall be in accordance with Section 6 of these Specifications.

515SIDE DRAINS

Whenever excavation works in side drains constitutes a separate operation from the bulk earthworks, such excavation shall be classified as catch water drains under Section 8 of the Specifications

517MEASUREMENT AND PAYMENT

Notwithstanding the provisions of clause 517 of the standard specifications, the rate for compaction of fill in soft material shall allow for the requirements of clause 508 of the special specification and no extra payment shall be made for compaction around pipe culverts (95% MDD AASHTO T180)

Quantities for embankment widening shall be measured using the final compacted volume of fill material over the existing embankment after removal of topsoil. Payment for fill for widening shall be made under Item 5.01 of the Bill of Quantities. No payment shall be made to the Contractor for any additional earthworks resulting from his construction methods, or for working space for his construction plant and equipment, or for complying with the requirements of Clause 504. The Contractor shall include the cost of benching in his rates and prices.

The rate for cut to spoil shall also allow for cutting to spoil in any waterlogged areas.

No separate payment shall be made for overhaul, and the cost of haulage shall be included in the Contractor's rates and prices for earthworks.

The rates in the Bill of Quantities shall also include for earthworks associated with roadside amenities, service roads, walkways and any widenings.

6. SECTION 6 - QUARRIES, BORROW PITS, STOCKPILES AND SPOIL AREAS

603GENERAL

Notwithstanding any indications to the contrary in the Standard specification the Engineer will not make available to the Contractor any land for, nor has identified any specific areas for, quarries, borrow pits, stockpiles and spoil areas, and for access thereto.

The Contractor will be entirely responsible for locating suitable sources of materials complying with the Standard and Special Specifications, and for the procurement, winning, haulage to site of these materials and all costs involved therein. Similarly, the Contractor will be responsible for the provision and costs involved in providing suitable areas for stockpiling materials and spoil dumps. Should there be suitable sites for spoil dumps or stockpiles within the road reserve forming the site of the works, the Contractor may utilize these subject to the approval of the Engineer.

Quarries, borrow pits, stockpile and spoil areas shall be progressively restored as the works progress once their use is no longer required.

No additional payment will be made to the Contractor to cover costs arising from the requirements for this Section and the Contractor must include these costs in the rates inserted into the Bills of Quantities.

605 SAFETY AND PUBLIC HEALTH REQUIREMENT

Add the following to Clause 605:

When working the material sites, the Contractor shall time and arrange his works in such a way that at no time is the public safety endangered in any way.

607 SITE CLEARANCE AND REMOVAL OF TOPSOIL AND OVERBURDEN

Add the following to Clause 607:

Faces of quarries being higher than 4 metres shall be shaped to 1:10 out of the face. All quarries and borrow pits shall be permanently fenced with 5 strand barbed wire which shall be located 5 metres off the edge of the face. After reinstatement, the bottom of a quarry shall be covered with 0.20 m of soil and 0.15 m of topsoil.

611 OBTAINING OF BORROW MATERIALS

(a) Borrow Pit Locations

Borrow materials shall be located and obtained by the Contractor. Borrow materials shall comply with the requirements of the appropriate Specifications according to the use for which the material is intended.

The Contractor shall search for and test all possible sources of borrow material including any possible sources so designated by the Engineer, within an economic distance of the location where the borrow material is to be utilized.

The Contractor shall excavate the necessary trial holes, take such samples and perform such tests as are deemed necessary by the Engineer. The Contractor shall submit all the results to the Engineer in sufficient detail to satisfy him that the quality and quantity of material available in the proposed borrow area are acceptable for the intended use, all at the Contractor's expense. The Contractor shall propose the use of those borrow pits which will be most economic to the Employer.

Approval of borrow pits or borrow areas shall apply only to those portions of the pit or area from which acceptable materials can be obtained or produced. The Contractor shall conduct his operations in any approved pit or borrow area or portions thereof so as to produce acceptable material.

Any approval given by the Engineer shall not relieve the Contractor of the responsibility of ensuring that material obtained from a borrow pit or area complies in all respects with the specification for the material.

The Contractor shall plan his exploitation of borrow pits in such a manner that the various materials excavated can be selected and either loaded directly for use or pushed to stockpile in a borrow area for later loading. When this is not feasible for reasons beyond the Contractor's control, material to be reserved for later use shall be loaded, transported and temporarily stockpiled as ordered by the Engineer at locations outside the borrow area indicated by him and such temporary stockpiling shall be measured and paid for as Dayworks. No material reserved for a specific purpose shall be used for other purposes without the written approval of the Engineer.

612 OPENING AND WORKING OF BORROW PITS

(a) General

Notwithstanding any indications to the contrary in the Standard specification the Engineer will not make available to the Contractor any land for quarries, borrow pits, stockpiles and spoil areas, except for those areas in road reserves specifically approved by him

The contractor will be entirely responsible for locating suitable sources of materials complying with the Standard and Special Specifications, and for the procurement, Wining, haulage to site of these materials and all costs involved therein. Similarly, the contractor will be responsible for the provision and costs involved in providing suitable areas for stockpiling materials and spoil dumps. Should there be suitable sites for spoil dumps or stockpiles within the road reserve forming the site of the works the Contractor may utilise these subject to the approval of the Engineer

No additional payment will be made to the Contractor to cover costs arising from the requirements for this Clause and the Contractor must include these costs in the rates inserted into the Bills of Quantities

(b) Clearing and Grubbing, Topsoil and Overburden

The Contractor's rate for borrowed material must include for clearing and grubbing and the removal of topsoil and overburden. No separate payment will be made for this work.

(c) Excavation of Borrow Material

Where any borrow pit contains different types of materials, in separate layers which require to be mixed in order to produce a suitable product, the materials shall be excavated over the full depth of approved face in one operation without separation of the different types of material.

The Contractor shall exercise all reasonable care so as to avoid contamination of approved borrow material by the inclusion of clayey or otherwise unsuitable material from the floor of the borrow pit, from overburden, from unsuitable layers or from areas beyond the approved limits of the borrow area. During loading hard oversize material which will not break down during processing on the road shall be excluded as far as is practicable.

During the course of borrow operations and especially when excavating near the floor and outer boundaries of borrow areas, the Contractor shall plan his operations so as to reduce as far as possible the amount of earthmoving that will be necessary for the reinstating of borrow pits. Indiscriminate excavation without due regard for the desired final shape of the borrow pit will not be permitted.

The material in borrow pits shall be blasted or ripped and/or excavated in a manner that will ensure the effective breaking down of the material in the borrow pit before it is loaded. Rippable material which tends to break into large blocks shall be cross ripped.

(d) Quality Control at Borrow Pit

The Contractor shall be responsible for controlling his operations at every borrow pit where material is being excavated, to ensure compliance with the requirements of Subsection (b) above.

He shall carry out sufficient tests on the material being excavated from the borrow pit in order to satisfy himself that the quality of the material will comply with the specified requirements for the particular layer for which it will be used.

(e) Protection of Borrow Pit

Borrow pits shall be continuously protected against the ingress of surface water and the Contractor shall construct such temporary banks as may be required to divert surface water and as far as possible his operations shall be planned in such a way that the borrow pit is self-draining. Where this is not possible, borrow pits shall be dewatered by pumping. The Contractor shall be solely responsible for keeping borrow areas dry and ensuring that borrow material is sufficiently dry when required for use.

613 REINSTATEMENT OF BORROW AREAS

On completion of his operations in a borrow area, the Contractor shall reinstate the entire area so as to blend with the surrounding area and to permit the re-establishment of vegetation. For this purpose, the borrow area shall be shaped to even contours. All material in and around the borrow area, whether spoil from road building operations, excess stockpiled material, oversize material left in the borrow pit, material resulting from clearing and grubbing operations and excess overburden, shall be used or disposed off as directed by the Engineer. Material not capable of supporting vegetation shall be buried and used in shaping the borrow area and subsequently covered with soft material. All available soft material shall be spread evenly to the thickness directed and where sufficient material is not available for this purpose to cover the entire area, the remaining portions shall be scarified along the contours so as to avoid undue erosion.

All haul roads shall be obliterated and the surface scarified, earth banks constructed to prevent erosion and all damaged fences and other structures reinstated.

The shaping and reinstatement of the borrow pit shall be done in such a way that the borrow pit will be properly drained whenever practicable and where required, the Contractor shall place earth banks to divert any surface water away from the borrow area.

The reinstatement of any borrow pit shall be to the entire satisfaction of the Engineer and the Contractor shall submit to the Engineer a signed certificate from the landowner stating that he is fully satisfied with the reinstatement of any borrow area.

614 DISPOSAL OF BORROW MATERIAL

The Contractor shall not have the right to use material obtained from borrow pits for any purpose other than for the execution of this Contract. He shall not dispose off any borrow material whether processed or not either by sale or donation to any person without the written authority of the Employer.

615 MEASUREMENT AND PAYMENT

Clause 610 of the Standard Specification shall apply.

7. SECTION 7 - EXCAVATION AND FILLING FOR STRUCTURES

703EXCAVATION OF FOUNDATIONS FOR STRUCTURES

Unless otherwise instructed by the Engineer, all excavated surfaces in material other than hard material, on which foundations for structures shall be placed, shall be compacted to 97% MDD (AASHTO T180) immediately before structures are constructed.

Paragraph 4, last line: - Replace "95%" with "97%" and "T99" with "T180".

Add the following:

707BACKFILLING FOR STRUCTURES

All backfilling material shall be selected backfill complying with the requirements for a natural subbase material given in Clause 1203. Unless otherwise instructed by the Engineer, all backfilling material shall be compacted to a minimum of 97% MDD (AASHTO T180).

Porous filter material shall be clean, uniform, sand or crushed aggregate with a d50 between 0.4mm and 1.2mm and less than 5% particles finer than 75micron sieve. The d100 must be lower than 5mm

709EXCAVATIONS FOR RIVER TRAINING AND NEW WATER COURSES

Add the following:

Payments for river training and establishment of new watercourses shall only be made where such work constitute permanent works. Works done for road deviation or other temporary works shall not qualify for payment.

710STONE PITCHING

Stone pitching to drains, inlets and outlets of culverts, to embankments and around structure shall consist of sound unweathered rock approved by the Engineer. The stone as dressed shall be roughly cubical in shape with minimum dimensions of 150 x 150mm for normal thickness of stone pitching. Cement mortar Grouting will be done for all stone pitching areas and the top line of the stone pitching should be grouted/sealed with concrete class 15/20. The cement shall be mixed with sand in the ratio of 1:3 by volume to form the grout.

The surface to receive the pitching shall be compacted and trimmed to slope and the stone laid, interlocked and rammed into the material to give an even finished surface. Soil erosion is rampant along the project location and this can be minimized by ensuring that proper protection works is carried out along the drains using stone pitching. Most of the sections shall be stone pitched especially areas where we have steep slopes to minimize undermining of the road by rain water or as may be instructed by the Engineer.

In areas where stone pitching has been damaged, the Contractor shall identify such areas and notify the Engineer for his agreement of the extent of the Works required and his approval and instructions to proceed with the Works. Stone Pitching Repair and reconstruction shall be carried out in accordance with Clause 710 of the Standard Specifications.

711GABIONS

Where instructed by the Engineer the Contractor will install gabions as protection works to washout areas or bridge Piers and or Abutments. Gabions shall be constructed in accordance with Clause 711 of the Standard Specification

In cases where existing gabions have been damaged, the Contractor shall identify them and notify the Engineer for his agreement of the extent of the Work required and his approval and instructions to proceed with the Works

The Works shall involve removal of the damaged gabions / rocks, excavation to the correct levels and grades as directed by the Engineer, and in accordance with Clause 711 of the Standard Specifications and reconstruction with new gabions and other necessary materials as necessary. The damaged gabions shall be recovered and transported to the nearest Sub-County offices

712RIP-RAP PROTECTION WORK

Add the following at the end:

Quarry waste or similar approved material shall be used to backfill scoured and eroded side, outfall and cut-off drain. The material shall be compacted to form a flat or curved surface preparatory to stone pitching of drainage channels, existing and new scour checks as directed by the Engineer

The surface to receive the pitching shall be compacted and trimmed to slope and the stone hand laid, interlocked and rammed into the material to give an even finished surface. The interstices of the Pitching shall be rammed with in-situ material. The in-situ material immediately behind the pitching shall be compacted to minimum density of 95% MDD compaction (AASHTO T180)

714BACKFILL BELOW STRUCTURES

All backfilling material shall be selected backfill complying with the requirements for a natural subbase material given in Clause 1203. Unless otherwise instructed by the Engineer, all backfilling material shall be compacted to a minimum of 95% MDD (AASHTO T180)

8. SECTION 8 - CULVERT AND DRAINAGE WORKS

801SCOPE OF SECTION

Amend as follows:

The operations specified in this section apply to the installation of drainage works and reinstatement and improvement of the same.

In addition, this Section covers: -

- Installation of 600 mm, 900 mm or 1200 mm diameter pipe culverts using the balloon casting technology or precast pipes rings.
- Desilting and cleaning of existing pipes and outfall drains to make them free flowing.

804EXCAVATION FOR CULVERTS AND DRAINAGE WORKS

The Standard Specifications are amended as follows:

- (a) In paragraph 6, line 3, and in paragraph 7, line 5 and in paragraph 11, line 6, replace
 "95% MDD (AASHTO T99)" with "95% MDD (AASHTO T180)".
- (b) Removal of Existing Pipe Culverts

Where instructed by the Engineer, the Contractor shall excavate and remove existing culvert pipes and the void left after removal of culvert pipes shall be widened as necessary to accommodate new concrete bedding, pipe and haunching.

The void left by removal of pipes and end-structures shall be carefully preserved in order to accommodate replacement with 600 mm, 900 mm or 1200 mm diameter pipe culverts as directed by the Engineer.

Regarding backfill, reference is made to Clause 812.

(c) Excavation for Culverts and Drainage Works

The Contractor shall carry out all excavations for new culverts and drainage works to the lines, levels, inclinations, and dimensions shown on the Drawings or as instructed by the Engineer.

805EXCAVATION IN HARD MATERIAL

In the Standard Specifications, Sub-clauses 805(a) and 805 (b) delete ""95% MDD (AASHTO T99)" and insert "95% MDD (AASHTO T180").

In sub-clause 809(a), paragraph 1, line 1, substitute "95% MDD (AASHTO T99)" with "95% MDD (AASHTO T180").

In sub-clause 809(c), paragraph 2, line 4, between the words "compacted" and "and shaped" insert the words "to "95% MDD (AASHTO T180").

Hard material is material, which can be excavated only after blasting with explosives, or barring and wedging or the use of a mechanical breaker fitted with a rock point in good condition and operated correctly. Boulders of more than 0.2m³ occurring in soft material shall be classified as hard material.

809BEDDING AND LAYING OF PIPE CULVERTS

In sub-clause 809(a), paragraph 1, line 1, substitute "95%" with "100%".

Amend sub-clause 809(b), paragraph 1 as follows:

Where pipes are laid on a concrete bed the pipes shall be bedded on class 15/20 concrete at least 50mm thick, and extending the full width and length of the pipe barrel.

In sub-clause 809(c), paragraph 2, line 4, between the words "compacted" and "and shaped" insert the words "to 95% MDD (AASHTO T180)".

Add the following Sub-Clause 809(d):

Bedding, Laying and Surround for Concrete Pipe Culverts Cast In-Situ

In addition to the requirements of the Standard Specification, where the inflatable balloon method of casting culverts in-situ is used, thorough pre-construction trials shall be carried out and the necessary adjustments made to ensure that: -

- (i) Line and grade of the culverts is achievable
- (ii) The balloons and the pressure gauge/machine are in good working conditions
- (iii) The inner concrete barrel surface immediately in contact with the inflated balloon form shall achieve class F3 finish.

Besides this, the following amendments shall be made; -

- (a) Where inflatable balloons are used, the surround shall be 200mm.
- (b) Concrete surround shall be "class 20/20".

(c) BRC A252 mesh will be provided within the surround and bed as provided for in the drawings or as instructed by the engineer

The Contractor may propose an alternative method of casting culverts in-situ, which shall be subject to the approval of the Engineer. Culverts shall be constructed to conform to dimensions shown on the drawings.

Measurement and payment for culverts cast in-situ by use of balloon method or any other approved method shall be made per linear meter under the existing bill items. The rates inserted shall allow for compaction of the bottom of excavation to 100% MDD (AASHTO T.99) and the BRC mesh used.

810JOINTING CONCRETE PIPES

Amend as follows:

The concrete pipes for the culverts shall have ogee joints and will be jointed by 1:2 cement/ sand mortar and provided with fillets on the outside as described in clause 810 of the Standard Specification.

Payment shall be included in the relevant item under Bill of Quantity No. 8.

811CONCRETE BEDS, SURROUNDS AND HAUNCHES

Amend the Standard Specification line 1 of the second paragraph, to read as follows:

All concrete for beds shall be of class 15/20 whilst concrete for surrounds and haunches shall be of class 20/20 for cross drain culverts, complying with Section 17 of this Specification formed to the dimensions shown on the drawings or as instructed by the Engineer

812BACKFILLING OVER PIPE CULVERTS

In the Standard Specifications, clause 812

Delete paragraph 6 "for pipe culverts depth of 150mm", entirely.

Wherever the expression "dry density of 95% MDD (AASHTO T. 99)" occurs delete and replace with "dry density of 95% MDD (AASHTO T180)".

The rates entered for laying of pipe culverts shall allow for backfilling to pipe culverts and compacting to 97% MDD (AASHTO T180) and these works shall <u>not</u> be measured and paid for separately.

812.1 FILTER FABRIC FOR BACKFILLING BEHIND STRUCTURES, DRAINS AND REVETMENT WORKS

Where filter fabric is specified, it shall be durable non-woven geotextiles or synthetic fibres, unaffected by soil acidity, soil alkalinity and bacteria. The fabric shall be made by an approved, reputable manufacturer and shall have a mass and strength at least equal to the following criteria:

Usage	Mass g/m2	Wide Strip Tensile Strength kN/m2	Mullen Burst Strength kPa
Under and For Drainage Material	180	Mean 12/12	2160
Behind bridges, Box culverts,			
Under Gabions, Gabion	250	Mean 18/18	3040
Mattresses or Grouted Rip – Rap			
Under Rip-Rap and Rockfill	300	Mean 21/21	4200

The mesh size of the fabric shall be sufficient to effectively retain the material on which it is placed but shall not be greater than 150 microns.

The fabric shall be installed in accordance with the manufacturer's instructions. The fabric shall be placed on levelled ground, with sharp rocks and other objects which are likely to damage the fabric being removed and all pits and depressions being backfilled and compacted.

The fabric shall be overlapped by a minimum of 300 mm and stitched at joints in such a manner that the strength of the joints is at least 50 per cent of the strength of the fabric.

Rip-rap or gabions or other materials, as applicable, shall be placed carefully on the filter fabric in such a way as to avoid damage to the fabric. In any event construction procedures shall ensure no damage to the filter fabric or impairment of its design function. Should the filter fabric be damaged, it shall be replaced, including removal of the overlay material, in a manner approved by the Engineer.

No mechanical plant shall traffic over filter fabric unless a minimum thickness of 200 mm of fill material has been placed over the fabric.

813 PRECAST CONCRETE OPEN CHANNELS

Add the following to the Standard Specification clause 813:

813.1 Half Round Open Channels

These shall be provided as directed by the Engineer and in compliance with sections 813 and 820 of the Standard Specification.

Payment shall be according to Bill of Quantity No.8.

813.2 Invert Block Open Channels

These shall be provided as directed by the Engineer and in compliance with sections 813 and 820 of the standard specifications.

Where directed by the Engineer, the Contractor shall excavate in any material provide and place concrete for the bedding, backfill and remove surplus material to spoil, provide, lay and joint precast concrete invert blocks, side slabs, slotted drains and gulley chambers.

Precast concrete invert block side drains and gulley chambers shall comply with the requirements of BS 340, and shall be laid in accordance with the drawings.

Precast concrete invert block drains and side slabs shall be formed of concrete of the class specified and to the dimensions shown on the drawing. Drains shall not normally be laid to a radius of a curvature less than 10 times the bed width or a diameter of the drain.

Invert block drains shall be constructed in the positions and to the levels and dimensions shown on the drawings or as directed by the Engineer. The earth sides to such channels shall be neatly finished to a slope of 1: 1 or such other slope as the Engineer may direct. Invert block drains and side slabs shall be laid on 100 mm thick compacted approved gravel material and neatly jointed with mortar consisting of 1:3 cement: sand by volume.

813.3 Invert Block drain

Where instructed, the Contractor shall excavate, compact the excavated bed to 97% MDD AASHTO (T180), backfill as necessary with selected material compacted to 97% MDD AASHTO (T180) lay and joint invert block drains of 300mm diameter with two side slabs.

814 SUBSOIL DRAINS

Add the following:

In the event of excavation for repairs exposing local seepage, springs or high water table, the Engineer may instruct the provision of counter fort or French drains.

These drains shall consist of a trench excavated to the alignment, width, depth and gradient instructed by the Engineer and backfilled with approved compacted clean hard crushed rock as specified in Clause 814 of the Standard Specification. Where these drains lie within the carriageway, the carriageway shall be reinstated with compacted graded crushed stone or stabilised gravel and surfaced with hot asphalt or a surface dressing as instructed by the Engineer.

Payment will be made in accordance with Clause 820 of the Standard Specification.

814.1 Filter Fabric to Sub-Soil Drains

A filter fabric shall be placed under, around and over rock fill of the sub-soil drains. The provisions and placing of the fabric shall be in accordance with Clause 814 of the Standard Specification and Clause 822 of the Special Specification. Payment shall be in square metre of the fabric used.

817MITRE DRAINS, CUT-OFF DRAINS, CATCHWATER DRAINS, SIDE DRAINS, CULVERT OUTFALL DRAINS AND EARTH DAMS

Add the following Sub-Clauses:

817.1 Cleaning Existing Drains

In areas of existing side drains, mitre or outfall drains where such are blocked, the Engineer shall instruct the Contractor to clean and clear the drains to free flowing condition.

The work shall consist of:

- (a) Stripping and removal of any extraneous material to spoil including vegetation and roots in the drains to the satisfaction of the engineer.
- (b) Spreading of any spoil to the satisfaction of the Engineer.
- (c) Shaping the drains to free flowing condition as directed by the Engineer.

No extra payment will be made for cleaning of existing chains, and the costs shall be included in other Bill items.

817.2 Channels

The Engineer may instruct that the Contractor provides open channels in place of existing sub drains where the latter may be damaged or in any other place. The rates entered by the Contractor in the Bill of Quantities must include for removal and disposal of any sub drain material, excavation to line and level, backfilling and compaction as directed by the Engineer.

The channels shall be constructed of precast class 20/20 concrete of minimum 80 mm thickness and lengths or widths not exceeding 1000 mm. Joints shall be at least 15 mm wide filled with 1:2 cement sand mortar.

817.3 Spoil Material

The Contractor shall be responsible for removal from site of all materials excavated in the course of undertaking works in this section of the specifications, unless suitable for re-use, and deposit of the material in a spoil dump to be approved by the Engineer.

819 CLEANING AND MAINTENANCE

Add the following:

819.1 Desilting of Pipe Culverts

Where instructed, the Contractor shall desilt the existing pipe culverts by removing all the material from the pipe to make them clean and free flowing.

No separate payment will be made for such work and provision should be included in the rates.

820 MEASUREMENT AND PAYMENT

(a)

(b) Add Sub-Clause 823(r): -

(c)

- (d) Item : Concrete for balloon cast pipes/culverts
 - (e) cast in-situ
- (f) Unit : m^3

(g)

(h) The rate for concrete for each size of culvert instructed shall include for the surround and for the bedding as instructed including the A193 BRC mesh and shuttering, calculated from the dimensions given in the drawings or as directed by the Engineer.

(i)

The rate shall also include for the cost of providing and placing the concrete and complying with the requirements of Clauses 809, 810, 814, 819 and 1713 of the Standard Specification.

No extra payment shall be made for provision of inflatable forms/balloons and other requirements for casting culverts in-situ and the Contractor shall be deemed to have provided for these in his rates and prices.

- (j) Add Sub-Clause 823(s): -
- (k)
- (1) Item : Invert Block Drain
- (m) Unit : m

The payment for the invert block drain shall include the cost of the bottom drain and two side slabs and shall be measured in a linear metre.

(n) Add Sub-Clause 823(t): -

(0)

- (p) Item : Geotextile
- (q) Unit : m2

The payment for the geotextile shall be in square metres and shall include the cost of providing and placing as per the specifications or as instructed by the engineer

9. SECTION 9 – PASSAGE OF TRAFFIC

901TRAFFIC CONTROL AND DEVIATIONS

a) **Programme for the Control of Traffic**

Following the award of the contract, the Contractor shall submit to the Engineer a detailed Traffic Control Plan. Such plan shall be approved by the Engineer, and where necessary, by the appropriate statutory authority, before the Contractor commences work. The plan shall but is not limited to, the method of protection of the public and give details of the duration and hours of operation, location, type and numbers of traffic safety devices, barricades, warning signs, flag men equipped with two way radios and the like. The Traffic Control Plan shall be in accordance with and complimentary to the Programme of Works submitted under Clause 104

During the preparation of this Traffic Control Plan, the Contractor shall take into consideration the following;

- i) The Contractor shall conduct his operations in such a manner that no greater length or amount of work is undertaken than he can efficiently carry out having due regard to the rights and conveniences of the public and the requirements of this Section.
- ii) If the Contractor proposes a road closure, he shall provide an alternative routing of the traffic, which must be approved by the Engineer.
- iii) No revisions shall be made to the Traffic Control Plan without the prior written approval of the Engineer and the Contractor shall allow fourteen (14) days for the Engineer to review any request for revision of the Traffic Control Plan.
- iv) The Traffic Control Plan shall conform in all respects with the requirements of this Specification.

b) Penalty to comply with the requirements of Section 9

The failure or refusal to comply on part of the Contractor and or maintain the deviation, improve and maintain the existing road ahead of the works at the proper time, or to take the necessary actions for the safety and convenience of the public traffic as required by the statutory authorities, or as instructed by the Engineer, shall be sufficient cause for the Employer to apply a deduction of KES. One Hundred and Fifty Thousand (150,000) per day from any monies due to the Contractor, until all provisions prescribed have been complied with to the satisfaction of the Engineer.

c) Contractor's inspection of the site

The Contractor should allow for the costs of complying with the requirements of this clause in his rates. The Contractor will be deemed to have inspected the site and satisfied himself to the adequacy of his bid for these works and no additional payments will be made to the Contractor for any expenditure on traffic control or the provision of deviations. The Employer shall not be liable for inadequate prior investigations of this nature by the Contractor.

(d) Standard of Construction works

The standard of all works carried out under this Section shall comply with the requirements of the appropriate sections of these Specifications

903MAINTENANCE OF EXISTING ROAD

The Employer shall hand-over the existing road to the contractor at the commencement of the Contract. The Contractor shall be responsible for all repairs and maintenance during the duration of the Contract. Where the existing road is gravel, the Contractor shall maintain it with suitable approved gravel of properties detailed in 904 (c) below.

Where the existing road is paved, the contractor shall maintain it by repairing the potholes and edge breaks asphalt concrete. The work shall include, but not limited to, excavating and trimming around the pothole or edge break and removing deleterious material

The Contractor shall regularly inspect the road and carry out such repairs and maintenance to the satisfaction of the Engineer. If at any time, the Engineer draws the Contractor's attention to a road section which requires maintenance, the contractor shall promptly repair the section. The contractor shall be legally responsible for any accident or damage attributable to his failure to maintain the road.

904CONSTRUCTION OF DEVIATIONS

a) General

In addition to requirement of this clause, the maximum length of deviation road shall be restricted to 2Kms at any given time unless otherwise instructed. The Contractor shall construct and complete deviations to the satisfaction of the Engineer before commencing any permanent work on the existing road. Also during these works the contractor is supposed to provide a detour of adequate pipe culverts for pedestrian and traffic crossing where there is bridge works.

Contractor will be allowed to open further 2Km of the deviation road only when 80% of the permanent work has been completed on first one and he will not be allowed to open further 2Km till he has completed first 4Km of the road and has it opened to traffic

Where the old road exists near the main road, the Contractor shall use this road as deviation road.

b) Geometry

The carriageway width of the deviations shall not be less than 6.5m wide and suitable for 2-way lorry traffic unless otherwise specified.

c) Construction

Unless otherwise instructed gravel wearing course for the deviation shall be 150mm compacted thickness. The materials shall have a minimum CBR of 30% at "95% MDD (AASHTO T180"), Plasticity Index of less than 15% and grading class 1 as per section 10 of the Standard Specification. The Contractor shall allow in his rate for removal of

any unsuitable material before placing of gravel wearing course, as this will not be paid for separately.

In addition to provision of this clause, Contractor is required to sprinkle water at least 4 times a day at the rate of 1 - 1.4 litres/m² in regular interval to minimize the effects of dust. Latest sprinkling time shall be one hour before the sunset.

906PASSAGE OF TRAFFIC THROUGH THE WORKS

The Contractor shall arrange for passage of traffic through the works during construction whenever it is not practicable to make deviations. The contractor shall be reimbursed in accordance with the standard specifications.

Any damage caused by passing traffic through the works shall be made good at the contractor's own cost.

907SIGNS, BARRIERS AND LIGHTS

The Contractor shall provide signs, barriers and lights as shown in the drawings at the locations where the traffic is being carried off the existing road to the deviation and back again to existing road.

The Contractor shall provide ramps and carry out any other measures as instructed by the Engineer to safely carry traffic from the road to deviation.

Contrary to what has been specified in this clause the road signs provided shall be fully reflectorized and in conformity with clause 9.1 of the "Manual for Traffic Signs in Kenya Part II".

909ASSISTANCE TO PUBLIC

In addition to provision of clause 909, the Contractor shall maintain close liaison with the relevant authorities to clear any broken down or accident vehicles from the deviations and the main road, in order to maintain smooth and safe flow of the traffic.

912MEASUREMENT AND PAYMENT

(a) <u>Passage of traffic through the works</u>

Payment shall be made on Lump Sum basis.

(b) Maintenance of existing road

The Contractor will be paid by the cubic metre of compacted gravel used to maintain existing road.

(c) <u>Construct Deviation</u>

(i) Road Deviation

The Contractor shall be paid only 50% of the rate for this when he completes deviation road to the satisfaction of the Engineer. The balance shall be paid in equal monthly instalments over the contract period, as he satisfactorily maintains the deviation (as per clause 904 and 905 above) when it is in operation.

(ii) Deviation using Pipe Culverts

The Contractor shall be paid only 50% of the rate for this when he completes deviation to the satisfaction of the Engineer. The balance shall be paid in equal monthly instalments over the contract period, as he satisfactorily maintains the deviation when it is in operation. The Contractor shall be paid full amount when the bridge under construction will be in use.

(d) Assistance to Public

The Contractor will be deemed to have included cost of this item in other items and no separate payment shall be made.

10. SECTION 11 - SHOULDERS TO PAVEMENT

1101 GENERAL

Shoulders whose widths and construction approach is detailed in the drawings shall be constructed in accordance with sections 5, 12, 15 and 16 of the specifications as appropriate.

Add the following:

Footpaths will be constructed in accordance with the typical pavement cross-section, shown on the drawings or as directed by the Engineer.

1106 MEASUREMENT AND PAYMENT

Measurement and payment shall be in accordance with the relevant bill items in the Bill of Quantities.

11. SECTION 12 – NATURAL MATERIAL SUBBASE AND BASE

1203 SUBASE MATERIAL REQUIREMENTS

Natural materials for subbase shall conform to the specifications given under clause 1203 (a) in Section 12 of the Standard Specifications for NEAT subbase material

Compaction

The moisture content of the material shall be as directed by the Engineer but nevertheless within the range of 95% to 105% of the Optimum Moisture Content (T180). Minimum compaction shall be 95% MDD (T180)

Protection

The layer shall be covered with the next layer i.e. base-course as soon as possible, but not later than 7days after laying. Sprinkling the section with water shall precede laying the base-course to ensure the layer's moisture is within the moisture requirements

1209 MEASUREMENT AND PAYMENT

Natural material for subbase and base shall be measured by the cubic metre placed and compacted upon the road calculated as the product of the compacted sectional area laid and the length.

The method of measurement shall be "method - A" as in the standard specifications.

No extra payment will be made for haulage of gravel material as the overhaul costs shall be deemed to have been factored in the rates inserted in the Bills of Quantities

12. SECTION 13 - GRADED CRUSHED STONE FOR SUB-BASE AND BASE

1303 BASE MATERIAL REQUIREMENTS

Properties

Graded Crushed Stone shall comply in all respects comply with Section 13 of the Standard Specifications and shall be stone Class B in accordance with Clause 1303(b)

Grading

The Maximum Aggregate Size of the material shall be 0/40mm in accordance with Clause 1303(c)

Mixing

The material shall be mixed in an approved batching plant

Laying and compaction

Laying

GCS shall be placed by using a self-propelled spreader finisher fitted with an electronic level control device, and level control shall be from a tensioned wire supported at every 5m intervals. The graded crushed stone shall be finished to the tolerances given for base in Section 3 of these Specifications

Compaction

The moisture content of the material shall be as directed by the Engineer but nevertheless within the range of 90% to 100% of the Optimum Moisture Content (Vibrating Hammer Method). Minimum compaction shall be 97% MDD (Vibrating Hammer Method)

1309 PROTECTION

GCS layer shall be covered with MC70 prime coat as soon as possible, but not later than 7days after laying. Sprinkling the section with water shall precede spraying of the prime coat to ensure the layer's moisture is within the moisture requirements

13. SECTION 15 - BITUMINOUS SURFACE TREATMENTS

PART A – GENERAL

1501A BITUMINOUS SURFACE TREATMENT

Quality control, workmanship and equipment shall be to current international best practice. Bituminous surface treatments shall be carefully designed by the Contractor, taking into account traffic volumes, surface conditions and requirements for specific locations.

Application rates of the bitumen spray will be approved by the Engineer prior to any trial sections of the work, but the under listed is anticipated and can be used for guidance purpose:

a) Bitumen Spray Rates

- $1.1 1.3 \text{ l/m}^2$ for the single seal to main carriageway
- $1.1 1.3 \text{ l/m}^2$ for the single seal to shoulders and junctions.

1504A HEATING OF BITUMINOUS BINDER

Bitumen 80/100 shall be sprayed in the range of $170^{\circ}C - 180^{\circ}C$ and the maximum heating temperature is 190°C. Bituminous binder shall not be kept within spraying temperature range for periods exceeding 1 hour.

1505A ADHESION AGENT

For all surface dressing, an approved adhesion agent shall be added to the binder, unless otherwise instructed by the Engineer. Adhesion agent shall be added to, and well mixed with, the binder immediately before each spray run.

1506A CONSTRUCTION LIMITATIONS

No bituminous spray shall be applied to a surface with a road temperature of less than 25°C for surface dressing, and 15°C for prime coat, or with adverse weather conditions threatening. A minimum period of 6 weeks shall elapse between the placement of asphalt and the application thereon of bituminous surface dressing.

PART B - PRIME COAT

1502B MATERIALS FOR PRIME COAT AND TACK COAT

- i) The binder for prime coat shall be MC-30 and shall be applied over the full width of the surface of the course to receive the first layer of bituminous material.
- ii) The binder for the tack coat shall be K1-60 cationic emulsion. A tack coat shall be applied over the full width of the surface of each bituminous material to receive a further bituminous layer. A tack coat shall also be applied to any prime coat, which has lost its adhesive properties due to contamination or long exposure or weathering before receiving the bituminous layer. Such an application shall be made without additional expense to the Employer unless it is required due to reasons outside the Contractor's control.

1504B SPRAYING OF PRIME COAT AND TACK COAT

Application rates of the bituminous prime coat shall be designed by the Contractor to take into account surface condition of the surface to be primed, expected traffic conditions, blinding, and the time duration before the subsequent bituminous treatment is applied

The rate of spray of bituminous prime coat refers to the gross volume of the cut-back bitumen, that is to say the volume of the bitumen plus dilutant.

- iii) The rate of application of prime coat shall be 0.3 to 0.8 litres/m². The exact quantity to be applied may be varied within these limits to suit field conditions and will be determined from trials by the Engineer.
- iv) The rate of application of the tack coat on bituminous surfaces shall be 0.3 to 0.8 litres/m². The exact quantity to be applied may be varied within these limits to suit field conditions and will be determined from trials by the Contractor and approved by the Engineer.

1506B TOLERANCES

Tolerance shall be +5% of the rate ordered. Work records are to be kept on a daily basis, with details recorded and calculated at the end of each distributor run. The Contractor shall prepare and use a suitable record sheet, which records details of weather and road temperature conditions, length and width of each run, binder dipping before and after each run of the distributor, calculation of actual application rate, under or overspray, and spray outside tolerance. Actual application rates shall be calculated immediately after each run, so that the operation of the distributor can be adjusted to ensure subsequent application rates are within tolerance.

14. SECTION 16 - BITUMINOUS MIX BASES, BINDER COURSES AND WEARING COURSES

This section is divided into the following parts: -

Part A General

Part B Asphalt Concrete for Surfacing

All Bituminous mixes works shall be done in accordance with the standard specifications.

PART A – GENERAL

1603A CONSTRUCTION PLANT

(d) Compaction plant

To achieve specified densities it is expected that vibrating rollers will be required. To achieve satisfactory results it is essential that thorough preconstruction trials be carried out to ensure that the vibrating rollers are set up at the optimum amplitude and frequency for the material being laid, that they do not break down aggregate particles and that the optimum compaction temperatures are established to allow compaction without creating ripple effects or other distortions of the surfacing.

1606A SITE TRIALS

Delete the second paragraph and insert the following:

"The trials shall be carried out to: -

- a) Test materials designed in the laboratory so that a workable mix, which satisfies the specification requirements, can be selected.
- b) To enable the Contractor to demonstrate the suitability of his mixing and compaction equipment to provide and compact the material to the specified density and to confirm that the other specified requirements of the completed asphalt pavement layer can be achieved."

Renumber paragraph 5 from "(v) –(vi)" to read "(v)-(viii)"

1607A MIXING OF AGGREGATES AND BITUMEN

Delete the second and third paragraphs, then add the following:

The aggregates, minus the filler, prepared as specified above, shall be accurately weighed and conveyed into the mixer in proportionate amounts of each aggregate size required to meet the Job-Mix Formula. The required amount of bitumen for each batch shall be introduced into the mixer. In batch mixing, the bitumen shall be added after the aggregates have been introduced into the mixer and mixed for 5 to 10 seconds. The filler shall be added after the bitumen and mixing shall continue after addition of the filler for at least the time recommended by the plant manufacturer, or as much extra time as is necessary to obtain a homogeneous mixture, but for no longer.

Aggregate and bitumen shall each be heated to enter the mixing chamber at temperatures selected within the range 150 to 170° C. The temperature of the stone at entry to the mixing chamber shall not be more than 15° C higher than that of the bitumen; the temperature of the bitumen shall be such that on entry to the mixer its kinematic viscosity is in the range 150 - 300 centistokes. The temperature of the aggregate and bitumen at entry into the mixing chamber shall be chosen within the above limits and having regard to the prevailing air temperature and haulage distance to ensure that the temperature of the mix is between 135° C and 165° C when it is laid and not less than 120° C when rolling is commenced. If excessive displacement occurs under the roller the minimum rolling temperature may be reduced at the sole discretion of the Engineer.

The volume of the aggregate and bitumen shall not be so great as to extend above the tips of the mixer blades when the blades are in vertical position. All overheated and carbonised mixtures, which foam or show indication of moisture, will be rejected. When moisture is detected in the finished mixture, all aggregates in the bins shall be removed and returned to the stockpiles.

1608A TRANSPORTING THE MIXTURE

Delete entire clause and insert the following:

The mix shall be transported from the mixing plant to the spreader in trucks having tight, clean, smooth beds, which have been treated to prevent adhesion of the mixture to the truck bodies. Gasoline, kerosene, diesel fuel or other solvents shall not be used for this purpose. Loads shall be covered by waterproof canvas or metal sheets during wet weather. Vehicles shall be insulated when the air temperature and/or length of haul make this necessary to maintain the temperature between the specified limits. Any loads wetted excessively by rain will be rejected. Hauling over freshly laid material will not be permitted.

1609A LAYING THE MIXTURE

Add the following

Mixtures that have a temperature of less than 135°C when dumped into the spreader, will be rejected. The spreader shall be adjusted and the speed regulated so that the surface of the course will be smooth and the course of such depth that, when compacted, it will conform to the cross-section shown on the Drawings. Lanes shall be parallel to the road centreline.

Add the following:

All joints shall present the same texture, density and smoothness as other areas of the surfacing. The joints between old and new lanes or sections shall be carefully formed in such manner as to ensure a continuous bond between the old and new pavement. All contact surfaces at cold joints, joints with manholes, pits, etc. shall be coated with a thin, uniform coat of MC70 or other medium curing bitumen.

1610A COMPACTION

Add the following:

Tests for conformity with the smoothness and levels specified shall be made by the Contractor immediately after initial compaction and any deviations in excess of the specified tolerances shall be corrected by loosening the hot surface with rakes and removing or adding material as necessary before continuing the rolling. The speed of the rollers shall not exceed 5 km/h and shall at all times be slow enough to avoid displacement of the hot mixture. Any displacement of the mixture occurring as a result of reversing the direction of the roller, or from any other cause, shall be corrected at once by loosening the surface with rakes and re-rolling. Rolling of the surfacing shall be continued until all roller marks are eliminated and the required density is obtained.

The rollers shall not be permitted to stand on surfacing which has not been fully compacted. Precautions shall be taken to prevent the dropping of oil, grease, gasoline, or other foreign matter on any layer. The Contractor shall provide competent workmen who are capable of performing all work incidental to the correction of all surfacing irregularities.

After final rolling, no vehicular traffic of any kind shall be permitted for at least 24 hours.

1611A FINISHING, JOINTS AND EDGES Add the following:

Construction joints in the various pavement layers shall be staggered by at least the following distances:

(a) Joints in binder course relative to joints in wearing course: 500mm

(b) Joints in DBM base relative to joints in wearing course: 400mm

The Contractor shall produce a plan showing the position of all pavement construction joints for approval by the Engineer before pavement construction commences.

Transverse joints in DBM base, binder and wearing course shall be staggered by at least 500mm. The roller shall pass over the unprotected end of the freshly laid mixture only when laying of the surfacing is to be discontinued for such length of time as to permit the mixture to become cold. Otherwise 500mm at the end of the lane shall be left uncompacted.

Cold transverse joints shall be cut back to expose an even, vertical surface for the full compacted thickness of the course and painted with medium curing cutback bitumen as specified above. The fresh mixture shall be raked uniformly against the joint, and carefully compacted to ensure a good bond with the cold material.

The Contractor shall adjust any kerbs, gulley pots and chambers in accordance with final finished road level before laying the final wearing course.

1614A TOLERANCES

Passing sieves between 1.0 mm and 0.075 mm sieves	\pm 3% (by total weight of dry aggregate including mineral filler)
Passing 0.075 mm sieve	\pm 2% (by total weight of dry aggregate including mineral filler)

1616A MEASUREMENT AND PAYMENT FOR ROAD REINFORCEMENT

Item: Geogrid reinforcement netting

Unit: square metres (m²)

The rate shall include for supplying, cutting, place in accordance with the manufacturer's specification, a geotextile reinforcement on the existing surfacing or new surface before laying the dense bitumen macadam or other overlay material. The rate shall include for tacking the material, with tack coat if required and any clout nails.

PART B - ASPHALT CONCRETE FOR SURFACING

1601B DEFINITION

The Asphalt concrete shall be SUPERPAVE (SUperior PERforming Asphalt PAVEment). Modifications to the Standard Specification have been made below to correspond with SHRP SUPERPAVE system recommendations on the design of Hot Mix Asphalt (HMA). The design of hot mixes shall be in accordance with the procedure detailed in Overseas Road Note 19- "A guide to the design of hot mix asphalt in tropical and subtropical countries" and MS2 – "Asphalt Mix Design Methods, 7th Edition by Asphalt Institute". The Contractor shall provide copies of ORN 19 and MS2 to the Engineer at the start of the Project. The salient features with reference to Standard Specification are summarized below

1602B MATERIALS FOR ASPHALT CONCRETE

a) Penetration Grade Bitumen

Delete Sub-Section (a) and replace with: The bitumen shall be penetration grade 60/70, and shall meet the requirements of Table 4.3 in ORN 19 as summarized below

TEST		Test Method (ASTM)	Pen 60/70
Based on original bitumen penetration			
at 25°C		D5	60-70
Softening point (°C)		D36	46-56
Flash point (°C)	Min	D92	232
Solubility in trichloroethylene (%)	Min	D 2042	99
TFOT heating for 5 hr at 163 ^o C		D 1754	
a) Loss by mass (%)	Max		0.5
b) Penetration (% of original)	Min	D5	54
c) Ductility at 25 ^o C	Min	D 113	50

b) Aggregate

The coarse aggregate shall be entirely crushed rock from a source which is known to give high values of stability (>9kN) in the Marshall test. Crushed river gravel shall not be used. Aggregates shall meet the requirements given in Table 16B-1(b) below (Extracted from ORN 19, Table 4.1)

Property	Test	Property
Cleanliness	Sand equivalent for 4.75mm fraction ¹	> 40
	Plasticity index for materials passing 0.425mm sieve ²	<4
	Linear shrinkage for materials passing 0.425mm sieve,	<2
	%	

Table 16 B-1(b) Requirements of Aggregate

Particle shape	Flakiness Index (FI) ³	<25
Strength	Aggregate Crushing Value, (ACV) ⁴	
	Aggregate Impact Value, (AIV) ⁴	<25
	10% FACT (dry) kN ⁴	>160
	Los Angeles Abrasion, (LAA) ⁵	<30
Abrasion	Aggregate Abrasion Value ⁴	< 14
Soundness ⁷	Sodium Sulphate Soundness (SSS) Coarse aggregate	<10
	Sodium Sulphate Soundness (SSS) Fine aggregate	<16
5cycles	Magnesium Sulphate Soundness (MSS) Coarse	<15
% loss	aggregate	<20
	Magnesium Sulphate Soundness (MSS) Fine aggregate	
Polishing	Polished Stone Value	>57
Water	Water absorption , % ⁶	<2
absorption		
Bitumen affinity	Immersion Mechanical Test: Index of retained	>75
	Marshall stability ,% ⁸	
	Static Immersion Test, % coating retained ⁹	>95
	Retained Indirect Tensile Strength % at 7% VIM ¹⁰	>79

- 1. AASHTO T176
- 2. British Standard 1377: Part 2
- 3. British Standard 812: Part 105
- 4. British Standard 812: Part 110 to 114
- 5. ASTM C131 and C 535
- 6. British Standard 812: Part 2
- 7. AASHTO T104
- 8. D Whiteoak (1990)
- 9. AASHTO T 182
- 10. AASHTO T 283

Fine aggregate (passing a 6.3mm sieve) shall consist of entirely crushed rock produced from stone having a Los Angeles Abrasion of not more than 40%

Aggregates for bituminous mixes shall be stored in single size in separate bins or on areas covered with tightly laid wood planks, sheet metal, hard compacted gravel, concrete or other hard and clean surfaces. The surface shall be self-draining, and in such a manner that will preclude the inclusion of foreign material. Aggregates of different grades and sizes and from different sources shall be stored in separate piles, and if these piles are close together they shall be separated by bulk heads

1603B GRADING REQUIREMENTS

The grading of the mixture of coarse and fine aggregate shall be as per the particle size distribution for SUPERPAVE Gradation Requirements detailed under table 6.3 of MS2 or table 5.2 of ORN 19

For better workability of asphalt concrete designed to refusal density and for laying thickness of 50mm, the Maximum Aggregate Size (MAS) shall be limited to 19mm

The Contractor shall investigate number of gradings so that a workable mix, which also retains a minimum of 3% voids at refusal density, is identified. Restricted Zone boundaries shown under table 3.3 of MS2 shall be used as guidance towards identifying such a grading

1604B REQUIREMENTS FOR ASPHALT CONCRETE

The mixture shall comply with the requirements given in table 6.5, MS2. Adopt 20-year ESAL (in millions) as 4.9

In addition, under Marshall Mix Design Criteria, the mixture shall comply with the requirements given in table 7.2, MS2

The proportion, by weight of total mixture, of bitumen shall be 4.5 - 6.0 % for 19mm MAS. This shall be termed the nominal binder content. The binder content of the working mix will be instructed by the Engineer following laboratory and site trials.

In order to determine the suitability of a coarse aggregate source, a Marshall test programme shall be carried out. It will be advantageous to use crushed rock, which is known from past experience to give good results

Having established the suitability of the aggregate source several gradings shall be tested in the laboratory, including that used for the Marshall test. The blended grading shall include coarse, intermediate and fine grading that pass below the restricted zone, which shall increase the degree of interlock. For each mix, samples shall be made up to a range of bitumen contents at reducing interval of 0.25% from the nominal binder content and compacted using a gyratory compactor. Compaction to refusal shall be by vibratory hammer in accordance with the procedure described in BS 598 (Part 104: 1989), to establish relationships between bitumen content and VIM at refusal density for all the gradings

It should first be confirmed that compaction on one face of the sample gives the same refusal density as when the same compaction cycle is applied to both faces of the same sample. The procedure, which gives the highest density, must be used and shall be submitted to the Engineer for approval

From the above bitumen content - VIM @ refusal density relationship, it shall be possible to identify a bitumen content which corresponds to VIM of 3% for each grading.

To determine the workability of the mix, compaction trials should be undertaken in these gradings with designed binder content @ 3% VIM. It is advisable to establish two or more gradings for compaction trials

The compaction trials will identify a workable mix which can be made to a bitumen content which gives 3% VIM at refusal density and meeting the SUPERPAVE mixture requirements. The mixes identified in compaction trials should be manufactured to the laboratory design bitumen content and to two other bitumen contents. Cores will be cut to determine the density of the compacted material, this core will then be reheated to $145+/-5^{0}$ C in the appropriate mould and compacted to refusal using the vibrating hammer. To be acceptable the cores cut from the compaction trial must have a density equivalent to at least 95% of refusal density

The results of all the mix design options, laboratory and site trials for the adopted mix and the Contractor's recommendations are to be submitted to the Engineer for approval

1605B MIXING AND LAYING ASPHALT

The temperature of the bitumen and aggregates when mixed shall be $110+/-3^{\circ}C$ above the softening point (Ring and Ball) of the bitumen

Compaction should commence as soon as the mix can support the roller without undue displacement of material and with the temperature of the mix $>120^{\circ}$ C, and completed before the temperature of the mix falls below 90° C.

1606B COMPACTION

Rolling shall be continued until compaction of the completed layer attains a minimum mean value of 95% of refusal density (no value less than 93%) and until the voids measured in the compacted layer are within the specified range as appropriate.

15. SECTION 17 - CONCRETE WORKS

1703 MATERIALS FOR CONCRETE

All materials shall comply with the requirements of section 1703 of the standard specifications.

Cement for all concrete works shall be CEM I, 42.5N Portland Cement manufactured to KS EAS 18-1: 2001 - Part 1, KS 1725: 2001 standards

1703 DESIGN OF CONCRETE MIXES

The following classes of concrete shall be designed and mix proportions approved for use as follows:

Class 15/20 for all blinding to structures and precast pipe culvert beds and surrounds

Class 25/20 for all culvert headwalls, wingwalls, aprons, toewalls, and bridge members; abutments, piers and deck

1713 FINISHES ON UNFORMED SURFACES

All unformed surfaces shall be finished to class UF 3 Finish in accordance with the standard specifications

1725 SURFACE FINISHES

All surfaces shall be finished to class F3 finish in accordance with the standard specifications.

1728 REINFORCEMENT FOR CONCRETE

All reinforcement to concrete shall be hot rolled high yield deformed bars complying with BS 4449 and steel mesh fabric to BS 4483

1741 MEASUREMENT AND PAYMENT

a) Item: Concrete

Amend clause 1741 (a) (iv) of standard specifications to read "class UF 3 finish"

b) Item: formwork for formed surface finishes

Amend the following to Clause 1741 (e) of the Standard Specification: Unit m² of formwork shall cover inclined formwork of all slopes and angles.

SECTION 19 – STRUCTURAL STEEL WORK

1901 GENERAL

The fabrication and erection of all structural steelwork shall be under the constant supervision of competent and experienced personnel, and to the approval and satisfaction of the Engineer. All workmanship shall be in accordance with the best modern workshop practice and only skilled workers trained and experienced in steel fabrication and erection shall be employed.

1902 APPLICABLE STANDARDS AND QUALITY ASSURANCES

The supply, fabrication and erection of structural steelwork shall be in accordance with the provisions of the relevant clauses of the following British Standard:

BS 4360 or Latest BS EN Equivalent: Weldable structural steels

BS EN 1011:Metal arc welding of carbon and manganese steels BS 638 or Latest BS EN Equivalent: Arc welding plant, equipment and accessories

BS 639 or Latest BS EN Equivalent: Covered electrodes for the manual-arc welding of mild steel and medium tensile steel.

BS 4870 or Latest BS EN Equivalent: Approval testing of welding procedure, Part I: Fusion welding of steel.

BS 4871 or Latest BS EN Equivalent: Approval testing of welders, working to Approved Welding Procedures Part I – Fusion welding of steel.

BS 5493 or Latest BS EN Equivalent: Steel and Iron, protective cover against corrosion.

The Contractor shall submit a Quality Assurance Plan to the Engineer for approval before fabrication.

1903 MATERIALS

All Structural steel shall be to the Grade as defined on the Drawings and shall comply with the requirements of the respective codes of practice in every respect.

1904 STORAGE OF MATERIALS

The material shall be stored in such a manner that will not render it unsuitable for the intended use. No separate payment shall be made in respect to storage of materials.

1905 FABRICATION AND SHOP DRAWINGS

The Contractor shall submit shop drawings to the Engineer at least fourteen (14) days prior to commencement of fabrication, and shall only commence fabrication upon receipt of a written approval from the Engineer.

The Contractor shall make arrangements for the supervision and inspection of the materials and the fabricated members while still in the workshop. No extra payments shall be payable for the inspection and the Contractor should have included the same in the rates.

The Contractor shall allow for assembly and dismantling of the structure while still in the workshop for inspection.

The Contractor shall mark with indelible ink all the components/parts of the girders in a clear manner as to allow for accurate and ease of installation on site.

1906 BOLTS AND WELDS

In line with standard specifications, the bolts and nuts shall be galvanized with sizes and specifications as indicated in the drawing.

For HSFG bolts, the material surfaces should be free of grease, lubricant, dust or rust and shall be thoroughly cleaned before assembly and the nuts shall be pre-tensioned.

All welding shall be done by sub-merged arc welding and the contrary shall be to the Engineer's approval.

Welding processes to be adopted to shall be such that distortions are minimized and where such distortions occur, they shall be corrected by heat application method as shall be directed by the Engineer.

1907 SITE CONNECTIONS

All connection done on site shall be bolted with all the holes having been DRILLED in the workshop. Any adjustments to the holes must be done with the Engineer's knowledge. NO welding shall be carried out on site.

1908 TRANSPORTATION, HANDLING AND ERECTION

All the components/parts shall be such that special modes of transport will not be required.

Launching and erection equipment shall be included in the supply of the steel girders. No extra payments shall be made on the transportation, handling or erection of the girders.

To ensure composite action, provide temporary column supports for the girders at 13.3m centres prior to pouring of concrete. These supports shall not be removed for at least 14days after concreting the deck slab. The deflection due to dead load from steel and concrete will then be resisted by composite action.

1909 SURFACE PREPARATION AND STEELWORKS

In addition to the requirements of standard specifications all steel components shall be galvanized to produce a minimum Dry Film Thickness (DFT) of $240\mu m$. The galvanizing method shall be cold galvanizing with 96% Zinc Product.

1910 PAINTING

The steel after fabrication shall be applied with at least two coats of grey oxide. Surfaces that are in inaccessible after fabrication shall be cleaned prior to the fabrication and painted with two coats of grey oxide.

Surfaces in contact other than the above shall be cleaned and painted with one coat of grey primer. They shall be brought together while the paint is still wet.

Surfaces to be encased in concrete shall be left unpainted.

1911 MEASUREMENT AND PAYMENTS

Notwithstanding any indications in the contrary to the standard specifications the mode of payment for the steel girder bridge shall be as follows:-

60% of value shall be paid on fabrication, inspection, of and approval by the Engineer.30% of value shall be paid on delivery and installation10% of value shall be paid on commissioning

16. SECTION 20 - ROAD FURNITURE

2001 ROAD RESERVE BOUNDARY POSTS

Road reserve boundary posts shall be provided, with reference points, in compliance with Standard Specification Clause 2001.

2002 FENCING AND GATES

Add the following:

"Construction material for gates shall be steel. Fencing shall be constituted of wood permanent posts and six strand wire."

2003 EDGE MARKER POSTS

Edge marker posts shall be provided as directed by the Engineer and in compliance with Standard Specification Clause 2003.

2004 PERMANENT ROAD SIGNS

Permanent Road Signs shall be provided as directed by the Engineer and in compliance with the requirements of the "Manual for Traffic Signs in Kenya - Part II" and Standard Specification Clause 2004.

2004B EXISTING ROAD SIGNS

Where directed by the Engineer, the Contractor shall take down road signs including all posts, nuts, bolts and fittings, and remove and dispose of the concrete foundation and backfill the post holes.

Measurement and payment for taking down road signs shall be made by the number of signs of any type and size taken down, cleaned and delivered as directed.

2005 ROAD MARKING

Road marking paints shall be hot applied thermoplastic materials as specified in clause 219 of the Standard Specifications

2005A RAISED PAVEMENT MARKERS – ROAD STUDS

MATERIAL

Road studs are moulded of Acrylonitrile Butadiene Styrene (ABS) conforming to ASTM Specification D1788 – 68, Class 5-2-2 shell filled with inert, thermosetting compound and filler. The lens portion of the marker is of optical menthyl methacrylic.

CONSTRUCTION

The Road Stud shall be constructed of high impact ABS containing a multi-biconvex glass lens reflector system. It shall be of monolithic construction, and not less than 98.5mm2.

KeNHA/R5/242/2024

The height of the marker shall not exceed 17mm and the underside shall contain a non-honeycomb base (flat).

REQUIREMENTS

The markers shall conform to the following requirements:

a) Colour

Shall be white, yellow or red as specified and the Retro – reflectance values should conform to the testing procedures of ASTME 809.

b) Impact Resistance

The marker shall not crack or break when tested using a 1000gram weight from a height of 1 metre. (ASTM D 2444) or BS 3900 Part E3.

c) Resistance to Water Penetration

There shall be no water penetration behind the lens after submerged in a water bath at 70 + 50 oF for 10 minutes. And it should still meet the reflectance Requirement as stipulated by BS 998.

d) Heat Resistance

Shall comply with the initial brightness as per BS 873 Part IV of 1978

e) Night Visibility

The marker shall be brightas per BS 873 Part IV of 1978

f) Compression Resistance

There shall be no cracking sound at a pressure lower than 25 tones as per BS 873 Part IV of 1978.

g) Corrosion Resistance

After immersing a sample of Road stud in a solution containing 30g/1 of sodium chloride for thirty (30) days, there shall not be any signs of corrosion, (BS 998).

Note: These markers are intended for application directly to pavement surfaces and are compatible with raised pavement makers. These adhesives should be of high quality and tested for conformance to customer requirements.

ADHESIVES

- i) They shall be of Resin Type Epoxy of 2 different components Part 1 and 2 i.e. Adhesive and Reactor without any volatile solvents in both.
- ii) Pot life: not less than 20 minutes at 20°C
- iii) Rotational cure time: between 20 and 30 minutes at 20°C
- iv) Hard cure: Between 40 and 60 minutes at 20°C

APPLICATION INSTRUCTION

Preparation of Pavements

Make sure that the road surface is absolutely dry and free of oil and grease.

Mixing of Adhesive

Pour component B into the container of component A. Stir mixture by hand with a wooden or metal stick until uniform Grey Tint without a striate is obtained.

Installation

Pour the mixture on to the underside of the road stud. Then place the road stud firmly on the road surface. Adhesive should stand out for about 5mm to 10mm over the edges of the stud.

Protection from the Traffic

Protect studs from traffic for 2 hours until the adhesive has properly hardened. Try by touching the adhesive.

NUMBER OF STUDS NEEDED FOR LABORATORY TESTS

In order to approve a particular type of road stud, 4 sample road studs of each colour shall be submitted.

2006 GUARDRAILS

All materials for guardrails shall comply with the requirements of AASHTO M180-98. Guardrail posts and spacer blocks shall be galvanized UNP steel profiles 120 x 55x7mm or of the type and size shown on the drawings, with posts driven vertically at least 1.2m into the shoulder as directed by the Engineer.

Beams for guardrails shall be "Armco Flexbeam" or similar obtained from a manufacturer approved by the Engineer.

Reflective plates shall be galvanized V-type shape, manufactured from 1.5mm thick mild steel plate, with the outer surfaces coated with engineering grade retro-reflective material. Holes for fixing shall be drilled before the plates are galvanized.

2007 KERBS

a) Vertical Joints

Vertical joints between adjacent Kerbs shall not be greater than 5 mm in width and shall be filled with a mortar consisting of 1:3 cement: sand by volume.

b) Transition between flush and raised kerbs

The transition between flush and raised kerbs (e.g. at bus bays) shall be termed as ramped kerbs. The transition between flush and raised kerbs shall occur within a length of 2.0m.

2008 KILOMETER MARKER POSTS

Kilometre marker posts shall be provided as directed by the Engineer and in compliance with Standard Specification Clause 2008.

2009 **RUMBLE STRIPS**

The Contractor shall provide, place, trim, shape and compact to line and level asphaltic concrete rumble strips on the finished shoulders as directed by the Engineer.

Asphaltic concrete rumble strip sets to the full width of the carriageway and shoulders shall also be placed as warning strips to speed humps at the preselected locations marked on the Drawings to the satisfaction of the Engineer.

2010 **TREES**

Trees will be planted according to the advice given by the District Forest Officer or if not available, from an alternative source approved by the Engineer. The rate shall allow for transportation to site, planting as directed by the Engineer, watering during the first dry season after the planting, and protection until the end of the Maintenance Period.

2012 SERVICE DUCTS

Service ducts shall be provided in locations as directed by the Engineer. Ducts shall be heavy duty PVC spigot and socket pipe of 3mm minimum wall thickness. Minimum cover to the top of the pipe from formation level shall be 0.6m. Pipes shall be bedded and surrounded by a 100mm minimum thickness of compacted fine granular material of 10mm maximum size. The remainder of the trench shall be backfilled with selected backfill material of subbase quality up to the top of formation level.

Measurement and payment shall be by the metre of pipe installed, and shall include all excavation, spoil, bedding and surround, backfill, transport, supply, bed, lay of PVC pipe complete with 2mm galvanised draw wire, and end sealing caps and end markers.

2013 ROAD HUMPS

Where shown on the drawings or directed by the Engineer, the Contractor shall provide, place, trim, shape and compact to line and level road humps.

Road humps shall be constructed in asphaltic concrete or concrete class 20/10 to the dimensions shown on the drawings or as directed by the Engineer.

Road humps should be painted with white thermoplastic paint of 45° diagonal strips as shown on the drawings.

2014 RAISED ZEBRA CROSSING

Where shown on the drawings or as directed by the Engineer, the Contractor shall provide, place, trim, shape and compact to line and level flat-topped zebra crossing as detailed on the drawings.

2015 DUCT MARKER POSTS

Duct markers shall be installed by the Contractor at each end of the services ducts provided under clause 2015. The duct marker shall be located immediately beyond the outer edge of the shoulder or footpath and as close to the line of the duct as physical constraints permit. Where several ducts are laid side by side, only one duct marker post

will be necessary. The duct marker posts shall be constructed as shown on the Drawings and shall be clearly and durably marked on the side facing away from the road. The marker post shall be inscribed "X ducts" where X is the number of ducts laid in the group marked by the marker post.

2016 CULVERT MARKER POSTS

Culvert markers shall be installed by the Contractor at each end of culverts constructed along the project road. The culvert marker shall be located immediately beyond the outer edge of the shoulder or footpath and as close to the line of the culvert as physical constraints permit. Where several culverts are laid side by side, only one culvert marker post will be necessary at each end of the culverts. The culvert marker posts shall be constructed as shown on the Drawings and shall be clearly and durably marked on the side facing away from the road. The marker post shall be inscribed "X culverts" where X is the number of culverts laid in the group marked by the marker post.

2017 BOLLARDS

Where shown on the Drawings or instructed by the Engineer, the Contractor shall construct permanent bollards. The bollards shall be precast using a class of concrete as shown on the drawings.

2018 PLOT BOUNDARY BEACONS

Where shown on the Drawings or instructed by the Engineer, the Contractor shall construct plot boundary beacons. The plot boundary beacons shall be 1.2m long reinforced concrete post with 150x150mm cross-section founded on 450x450x350 mass concrete as shown on the drawings.

2019 CHANNEL BLOCKS

The Contractor shall provide, lay and joint 125mm x125 and 125mm x 250mm channel blocks to roads, footpaths and shoulders as shown on the Drawings or as instructed by the Engineer.

2021 MEASUREMENT AND PAYMENT

Item: Reflective road studs

Unit: No

Road studs shall be measured by the number instructed and installed. The rate shall include for the cost of provision and transport of all materials, preparation of the road surface, application of adhesives and full compliance with the manufacturer's instructions.

Item: Road humps

Unit: m

Road humps shall be measured by the length installed. The rate shall include for provision, installation and compaction to the satisfaction of the Engineer and removal of surplus material.

Item: Flat topped zebra crossing

Unit: No

Flat topped zebra crossings shall be measured by the number instructed and installed. The rate shall include for all materials, labour and equipment, and all measures required in the construction of the crossing, in accordance with the drawings.

Item: Service ducts

Unit: m

Service ducts shall be measured by the metre as the length of duct installed as per the Engineer's instructions. The rate shall include for providing all materials, excavation, installation of PVC ducts, backfilling to the formation level, compaction, all in accordance with clause 2015.

Item: Duct Marker Post

Unit: No

Duct marker posts shall be measured by the number instructed and installed. The rate shall include for provision and installation of posts, all excavation and backfill, compaction to the satisfaction of the Engineer.

Item: Culvert marker post

Unit: No

Culvert marker posts shall be measured by the number instructed and installed. The rate shall include for provision and installation of posts, all excavation and backfill, compaction to the satisfaction of the Engineer.

Item: Bollards:

Unit: No

Bollards shall be measured by the number instructed and installed. The rate shall include for provision and installation of bollards, all excavation and backfill, compaction to the satisfaction of the Engineer.

Item: Plot boundary beacons

Unit: No

Plot boundary beacons shall be measured by the number instructed and installed. The rate shall include provision, transport of materials, excavation, erection of beacons and backfill, compaction to the satisfaction of the Engineer.

Item: Channel blocks

Unit: m

Channel blocks shall be measured by the length installed, in accordance with the drawings, or as instructed by the Engineer. The unit rate shall include for all excavation (including in hard materials) provision and placing of backing and bedding concrete, cutting of blocks as necessary, and placing of channel blocks to the line and level shown on the drawings or as instructed by the Engineer.

SECTION IX – DRAWINGS

-The Book of Drawings has been provided separately.

Note: A list of drawings should be inserted here. The actual drawings including Site plans should be annexed in a separate booklet.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION X CONDITIONS

CONDITIONS OF CONTRACT, PART I - GENERAL

SECTION IX CONDITIONS OF CONTRACT PART I: GENERAL CONDITIONS OF CONTRACT

Red Book:

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The Conditions of Contract are the "General Conditions" which form part of the "Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer ("Red book") First Edition 1999" published by the Federation Internationale Des Ingenieurs – Conseils (FIDIC) and the following "Particular Conditions" which comprise of the amendments and additions to such General Conditions.

An original copy of the above FIDIC publication i.e. "*Conditions of Contract for Building and Engineering Works Designed by the Employer*" must be obtained from FIDIC.

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FIDIC Bookshop – Box- 311 – CH – 1215 Geneva 15 Switzerland		
Fax	:	+41 22 799 49 054
Telephone	:	+41 22 799 49 01
Email	:	fidic@fidic.org
www.fidic.org/http://www.fidic.org/		
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SECTION X - CONDITIONS OF CONTRACT PART II -CONDITIONS OF PARTICULAR APPLICATION

SECTION X: CONDITIONS OF CONTRACT PART II: (CONDITIONS OF PARTICULAR APPLICATION)

The following Special Provisions 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 Condition of Contract to which it relates.

SUB-CLAUSE 1.1: DEFINITIONS

Amend these sub-clause as follows:

1.1.1.3 Amend the paragraph by adding the following: Letter of Acceptance is synonymous with Notification of Award.

1.1.1.4: Amend the paragraph by adding the following words at the end: The words Letter of Tender is synonymous with Form of Tender.

1.1.1.7: Insert in line 4 after the prices", the following, "entered by the Contractor (whether or not such rate be employed in computation of the Accepted Contract Amount),"

1.1.1.8: Amend the paragraph by adding the following words at the end:

The word "Tender" is synonymous with "bid"

1.1.1.9 Amend the paragraph by adding the following words at the end: The words Appendix to Tender or Appendix to Form of Tender is synonymous with Contract Data.

1.1.2.5 Amend the paragraph by adding the following words at the end: The words Contractor's representative is synonymous with Site Agent or Road Manager.

SUB-CLAUSE 1.4: LANGUAGE AND LAW

Insert:

The Contract shall be drawn up in the ENGLISH LANGUAGE. Communication between both Parties shall be in this given language.

The Laws applicable to this Contract shall be the Laws of The Republic of Kenya.

SUB-CLAUSE 1.5: PRIORITY OF DOCUMENTS

Delete the documents listed (a) - (h) and substitute with the following:

- a) The Contract Agreement (if completed)
- b) The Letter of Acceptance
- c) The Form of Tender
- d) Appendix to Form of Tender
- e) The Particular Conditions
- f) These General Conditions
- g) The Special Specifications
- h) The Standard Specification for Road and Bridge Construction, 1986
- i) The PBC Guidelines Edition 1.1 of February 2016

- j) Road Maintenance Manual, May 2010 Edition and Performance Based Contract Manuals.
- k) The Drawings;
- 1) The priced Bills of Quantities
- m) Other documents forming part of the Contract

SUB-CLAUSE 1.6: CONTRACT AGREEMENT

Replace the first sentence of the first paragraph with:

The parties shall sign a Contract Agreement within the period stipulated in the Appendix to Tender.

SUB-CLAUSE 3.1: ENGINEER'S DUTIES AND AUTHORITY

With reference to Sub-Clause 3.1, the following shall also apply:

The Engineer shall obtain the specific approval of the Employer before taking any of the following actions:

- d) Consenting to the subcontracting of any part of the works under Clause 4.4
- e) Determining an extension of time under Sub-clause 8.4
- f) Certifying additional cost determined under Clause 12
- g) Issuing a Variation under Clause 13

SUB-CLAUSE 4.2: PERFORMANCE SECURITY

Replace the text of the first and second Paragraph under Sub-clause 4.2 with the following:

"The Contractor shall provide the Performance Security to the Employer within 21 days after receipt of the Letter of Acceptance. The Performance Security shall be in the form of a bank guarantee as stipulated by the Employer in the Appendix to Tender. The Performance Security shall be issued by a bank incorporated in Kenya. The Contractor shall notify the Engineer when providing the Performance Security to the Employer.

Replace the text of the first sentence under the third paragraph under Sub-clause 4.2 with the following:

The Contractor shall ensure that the Performance Security is valid and enforceable until a date 28 days after the date of issue of the Performance Certificate.

Add the following after the fifth paragraph:

The Employer shall be at liberty to claim part or the entire performance Security without informing or notifying the Contractor provided that the conditions necessitating the claim are contractual.

SUB-CLAUSE 4.3: CONTRACTOR'S REPRESENTATIVE

Add the following at the end of the second paragraph:

The Contractor shall also submit a specimen signature of his proposed Site Agent /Road Manager who **SHALL** be the only signatory to payment of certificates/Monthly statements from the Contractor.

SUB-CLAUSE 4.4: SUBCONTRACTORS

Add after paragraph one the following:

The maximum allowable accumulated value of work subcontracted shall be as stated in the appendix to form of tender.

SUB-CLAUSE 4.8: SAFETY PROCEDURES

Add:

Notwithstanding the Contractor's obligation under Sub-Clause-paragraph (a) - (g) of Sub-Clause 4.8 of the Conditions of Contract, the Contractor shall observe the following measures with a view to enhance Road Safety to the Road Users and Site Workers:

- 1. Prepare and submit a comprehensive Road Safety Implementation Plan within 14 days after receipt of Order to Commence for the Engineer's Approval. The plan shall include but not limited to the following:
 - Night driving
 - Safety of workers
 - Diversions
 - Traffic management Plan
 - Towing of stalled vehicle
- 2. The Contractor should identify, evaluate and monitor potential traffic and road safety risks to workers and road users throughout the Contract life cycle and develop measures and plans to address them.
- 3. The Contractor shall install and maintain standard approved traffic warning signs, directional signs, secure the working areas and deploy flagmen at active construction sites.
- 4. The Contractor shall assess each phase of the works, monitor incidents and accidents indicating the mitigation measures undertaken and prepare monthly reports to be submitted to the Resident Engineer.
- 5. The Contractor shall factor the cost of implementation of the Road Safety Plan in the rates for the Works.

Failure by the Contractor to observe the above safety features shall be deemed to be a violation of the Contractor's Obligations and shall be grounds for Suspension and/or Termination.

SUB-CLAUSE 4.18: PROTECTION OF THE ENVIRONMENT *Add:*

Notwithstanding the Contractor's obligation under Sub-Clause-paragraph (a), (b) and (c) of Sub-Clause 1 of 4.18 of the Conditions of Contract, the Contractor shall observe the following measures with a view to reducing or elimination adverse environmental effects by the site works:

- 1. All quarries and borrow pits shall be filled and landscaped to their original state after extraction of construction material
- 2. Soil erosion due to surface runoff or water from culverts or other drainage structures should be avoided by putting in place proper erosion control measures that shall include, but are not limited to grassing and planting if trees
- 3. Long traffic diversion roads shall be avoided so as to minimize the effect of dust on the surrounding environment. In any case all diversions shall be kept damp and dust free

- 4. Spillage of oils, fuels and lubricants shall be avoided and if spilt, shall be collected and disposed of in such a way as not to adversely affect the environment
- 5. Rock blasting near settlement areas shall be properly coordinated with the relevant officers of the Government so as to minimize noise pollution and community interference.

SUB-CLAUSE 6.1: ENGAGEMENT OF STAFF AND LABOUR

Add the following at the end of clause 6.1:

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience who are Kenya citizens.

Any additional unskilled labour which is required by the Contractor for the works, and which is not in his employment schedule at the time of the acceptance of the Tender shall be recruited by the Contractor from the Labour Exchange or Exchange or Exchanges nearest to the site or sites of the work.

SUB-CLAUSE 6.5: WORKING HOURS

Add at the end of Sub-Clause 6.5 the following:

If the Contractor requests permission to work by night as well as by day, then if the Engineer shall grant such permission the Contractor shall not be entitled to any additional payments for so doing. All such work at night shall be carried out without unreasonable noise or other disturbance and the Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbance created while or in carrying out night work and from and against all claims, demands, proceedings, costs, charges and expenses whatsoever in regard or in relation to such liability.

In addition, the Contractor will be required to provide, for any work carried out at night or recognized days of rest, adequate lighting and other facilities so that the work is carried out safely and properly.

In the event of the Engineer granting permission to the Contractor to work double or rotary shifts or on Sundays, the Contractor shall be required to meet any additional costs to the Employer in the administration and supervision of the Contract arising from the granting of this permission."

SUB-CLAUSE 6.7: HEALTH AND SAFETY

Add under the first paragraph:

The Contractor shall compensate for loss of damage suffered in consequence of any accident or injury or disease resulting from his work to any workman or other person in the employment of the Contractor or any Subcontractor is in accordance with the Workmen's Compensation Act of the Laws of Kenya

The Contractor shall ensure adequate safety program with respect to all work under the contract is complied with, whether performed by the Contractor or subcontractor is formulated and enforced. Additionally, all records of health, safety and welfare shall be maintained as the Engineer may from time to time prescribe. Reports of accidents shall be submitted to the Engineer.

Add after the last paragraph:

In addition, the Contractor shall notify the Engineer and any relevant Authority the occurrence of these accidents

SUB-CLAUSE 7.4 TESTING

Add at the end of Sub-Clause 7.4 the following:

The Contractor shall submit to the Engineer, Project Specific Quality Management Plan for approval 14 days after issuance of order to commence. The Plan shall include but not limited to:

- 1. Key staff that will be involved in the project and their role in quality management
- 2. Resources (Human and machinery) and Resource allocation in quality management
- 3. Processes and procedures to be followed in quality management
- 4. Controls to be put in place to ensure that the quality management plan is adhered to.
- 5. Reporting methodology on quality Management
- 6. Methodology on inspection, testing, monitoring and measuring to ensure conformity to quality requirement in accordance with the contract.
- 7. Description on correction action to be undertaken on non-conforming outputs and corrective action to avoid recurrence.

SUBCLAUSE 8.3: PROGRAMME

Add after first paragraph:

The program shall be in the form of a Critical Path Method Network (CPM Network) showing the order of procedure and a description of the construction methods and arrangements by which the Contractor proposes to carry out the works. It should also be supplemented by a time –bar chart of the same program. The program shall be coordinated with climatic, groundwater and other conditions to provide for completion of the works in the order and by the time specified.

The Contractor shall submit to the Engineer not later than the day or date mentioned in the Appendix to the Form of Bid, a general description of his proposed arrangements and methods for the execution of the Works, including temporary offices, buildings, access roads, construction plant and its intended production output, working shift arrangements, labour strength, skilled and unskilled, supervision arrangements, power supply arrangements, supply of materials including a materials utilization program, stone crushing, aggregate production and storage, cement handling, concrete mixing and handling, methods of excavation, dealing with water, testing methods and facilities.

During the execution of the works, the Contractor shall submit to the Engineer full and detailed particulars of any proposed amendments to the arrangements and methods submitted in accordance with the foregoing.

If details of the Contractors proposals for Temporary Works are required by the Engineer for his own information the Contractor shall submit such details within fourteen days of being requested to do so.

The Resident Engineer may at his discretion provide to the Contractor a Format of submitting the Program of Works to comply with the Cash flow projections and budgets assigned to the project

The various operations pertaining to the works shall be carried out in such a progressive sequence as will achieve a continuous and consecutive output of fully completed roadworks inclusive of all bridge works and culverts within the time limits specified in the Contract. Generally, the Contractor shall start at one end of the road and progress continuously towards the other without leaving any isolated section or sections of uncompleted road provided always that the site of the works has been acquired in its entirety and the encumbrances and services thereon removed.

Add at the end of 8.3;

The Contractor shall allow in his programme all published Kenya public holidays including but not limited to the following per calendar year during which the Contractor shall not be permitted to work.

- New Year's Day (1st January)
- Good Friday
- Easter Monday
- Idd ul fitr
- Labour Day (1st May)
- Madaraka Day (1st June)
- Mazingira Day (10th October)
- Mashujaa Day (20th October)
- Jamhuri day (12th December)
- Christmas Day (25th December)
- Boxing Day (26th December)

The Contractor shall also allow per calendar year for a further 3 unspecified public holidays which may be announced by the Government of Kenya with no prior notification upon which he shall not be permitted to work.

SUBCLAUSE 8.7: DELAY DAMAGES

Add the following paragraphs at the end of this Sub-Clause:

"There shall be no reduction in the amount of liquidated damages in the event that a part or a section of the Works within the Contract is certified as completed before the whole of the Works comprising that Contract.

The Employer shall **NOT** pay any bonus for early completion of the Works to the Contractor.

SUBCLAUSE 11.1: COMPLETION OF OUTSTANDING WORK AND REMEDYING DEFECTS

Add:

At the expiry of the Defects Notification Period, no defect arising from the permanent works existing shall be acceptable for taking over. The Employer shall verify and satisfy themselves that

all the outstanding works and defects arising out of the works have been attended to sufficiently. Works shall also be inspected at the End of Defects Notification Period.

SUBCLAUSE 13.1: RIGHT TO VARY

Add the following paragraph at the end of subclause 13.1:

No such variations in any way shall contravene the requirements of Public Procurement and Disposal Act of 2015 and the amendments thereof.

SUB-CLAUSE 14.8: DELAYED PAYMENT

Replace the second paragraph with:

In the event of the failure of the Employer to make payment within the times stated, the Employer shall make payment to the Contractor of simple interest at a rate equal to two percentage points above the mean Base Lending Rate obtained from the Central Bank of Kenya. The provisions of this subclause are without prejudice to the Contractor's entitlements under subclause 16.2 or otherwise.

SUB-CLAUSE 14.15: CURRENCIES OF PAYMENT

The paragraphs are substituted with;

The Contract Price shall be designated in the Kenyan Shillings.

All work performed by the Contractor under the Contract shall be valued in Kenya Shillings using the rates and prices entered in the Bills of Quantities together with such other increases to the Contract Price including variation of price payments in accordance with Clause 13.

SUB-CLAUSE 18.1 GENERAL REQUIREMENTS FOR INSURANCES

Add the following at the end of the second paragraph:

Insurances shall not contain exclusion clauses which limit cover for activities necessary for the execution of the Contract.

All insurances shall cover the entire contract period and an additional three (3) months.

Each policy of insurance effected by the Contractor for purposes of the Contract shall include a provision to the effect that the Insurer shall have a duty to give notice in writing to the Contractor and Employer of the date when a premium becomes payable not be more than thirty (30) days before that date, and the policy shall remain in force until thirty (30) days after the giving of such notice.

SECTION XII - CONTRACT FORMS

TABLE OF FORMS

FORM No. 1 - NOTIFICATION OF INTENTION TO AWARD

FORM No. 2 - NOTIFICATION OF AWARD - LETTER OF ACCEPTANCE

FORM No. 3 - CONTRACT AGREEMENT

FORM No. 4 - PERFORMANCE SECURITY [Option 1 - Unconditional Demand BankKeNHA/R5/242/2024Issued by Kenya National Highways Authority207

Guarantee]

FORM No. 5 - ADVANCE PAYMENT SECURITY

FORM No. 6 - RETENTION MONEY SECURITY

FORM NO. 7 - BENEFICIAL OWNERSHIP DISCLOSURE FORM

FORM NO. I - NOTIFICATION OF INTENTION TO AWARD

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

FORMAT

For the attention of Tenderer's Authorized Representative

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

Date of Transmission:

This Notification is sent by: [*email*] on [*date*] (local time) Procuring Entity: [*insert the name of the Procuring entity*]

Contract title: *[insert the name of the contract]*

Country: Kenya, County_____(*if the Procuring Entity is from a County*)

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

- a) Request a debriefing in relation the evaluation of your Tender, and/or
- b) Submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Tenderer

Name: [insert name of successful Tenderer] Address: [insert address of the successful Tenderer] Contract price: [insert contract price of the successful Tender]

2 Other Tenderers: insert names of all Tenderers that submitted a Tender. If the Tender's price was evaluated include the evaluated price as well as the Tender price as read out.]

	Name of Tenderer	Tender price	Evaluated Tender price	Comments (if any)
1				
2				
3				
4				
5				
6				
7				
Etc.				

1. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).

You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award. Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:

Attention: [insert full name of person, if applicable] Title/position: [insert title/position] Procuring

Entity: [insert name of Procuring Entity] Email address: [insert email address]

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end. The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

2. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, *[insert date]* (local time).

Provide the contract name, reference number, name of the tenderer, contact details; and address the Procurement- related Complaint as follows:

Attention: [insert full name of person, if applicable]

Title/position: [insert title/position]

Procuring Entity: [insert name of Procuring Entity]

Email address: [insert email address]

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

In summary, there are four essential requirements:

- a) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.
- b) The complaint can only challenge the decision to award the contract.
- c) You must submit the complaint within the period stated above.
- d) You must include, in your complaint, all of the information necessary to support your case.
- e) The application must be accompanied by the fees set out in the Procurement Regulations, which shall not be refundable (information available from the Public Procurement Authority at <u>www.ppoa.go.ke</u>.

3. Standstill Period a) DEADLINI

- **DEADLINE:** The Standstill Period is due to end at midnight on [*insert date*] (local time).
 - i) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.
 - ii) The Standstill Period may be extended as stated in Section 4 above.

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

Procuring Entity:	
Name	-
Title and Position	-
Signature	
Date	<u>.</u>

FORM NO. 2 - NOTIFICATION OF AWARD

Letter of Acceptance

[letter head paper of the Procuring Entity]

[date]

FORMAT

To: [name and address of the Contractor]

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

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

We attach a copy of the Contact for your

Authorized Signature:

Name and Title of

Signatory: Name of

Agency:

Attachment: Contract Agreement

FORM NO. 3 – CONTRACT AGREEMENT

THIS AGREEMENT made the	day of		,, between
	of		(hereinafter "the
Procuring Entity"), of the one part, and		of	(herein after "the

Contractor"), of the other part:

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

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

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

Signed by	
	(for the Procuring Entity)
Signed by	
	(for the Contractor)

FORM NO. 4 - PERFORMANCE SECURITY

- (Unconditional Demand Bank Guarantee)

[Guarantor letterhead or SWIFT identifier code]

Beneficiary:_____[insert name and Address of Procuring

Entity] Date: [Insert date of issue]

PERFORMANCE GUARANTEE No.:

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

- 2. Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
- 3. At the request of the Applicant, we as Guarantor, here by irrevocably undertake to pay the Beneficiary

any sum or sums not exceeding in total an amount of (), ¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

- 5. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

[Name of Authorized Official, signature(s) and seals/stamps]

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

¹The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency(cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

²Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Procuring Entity might consider adding the following text to the form, at the end of the pen ultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

FORM NO. 5 - ADVANCE PAYMENT SECURITY

[Demand Bank Guarantee] [Guarantor letterhead or SWIFT]

*identifier code] [Guarantor letterhead or SWIFT identifier code]*Beneficiary:_____[Insert name and Address of Procuring
Entity] Date:_____[Insert date of issue]

ADVANCE PAYMENT GUARANTEE No.: [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

- 1. We have been informed that ______(herein after called "the Applicant") has entered into Contract No. _____dated _____with the Beneficiary, for the execution of ______(herein after called" the Contract").
- 2. Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum_____() is to be made against an advance payment guarantee.
- 3. At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____()¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:
 - a) Has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
 - b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.
- 4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number______at____
- 5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount,

less provisional sums, has been certified for payment, or on the _____day of ____,2__,² whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps]

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

¹ The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Procuring Entity.

²Insert the expected expiration date of the Time for Completion. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior **KeNHA/R5/242/2024** Issued by Kenya National Highways Authority 215

to the expiration date established in the guarantee. In preparing this guarantee, the Procuring Entity might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

FORM NO. 6 - RETENTION MONEY SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

 Beneficiary:
 [Insert name and Address of

 Procuring Entity]
 Date:

 [Insert date of issue]

ADVANCE PAYMENT GUARANTEE No.:

[Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

- 1. We have been informed that ______ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (herein after called" the Contractor") has entered into Contract No. ______ [insert reference number of the contract] dated with the Beneficiary, for the execution of _____ [insert name of contract and brief description of Works] (herein after called" the Contract").
- 2. Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of *[*insert the second half of the Retention Money] is to be made against a Retention Money guarantee.
- 3. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (*[insert amount in words_____]*)¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.
- 4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Contractor on its account number_at_____ *[insert name and address of Applicant's bank]*.
- 5. This guarantee shall expire no later than the...... Day of......, 2...², and any demand for payment under it must be received by us at the office indicated above on or before that date.
- 6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps] Note: All italicized text (including foot notes) is for use in preparing this form and shall be deleted from the final product.

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FORM NO. 7 - BENEFICIAL OWNERSHIP DISCLOSURE FORM

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

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer pursuant to Regulation 13 (2A) and 13 (6) of the Companies (Beneficial Ownership Information) Regulations, 2020. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the legal person (tenderer) or arrangements or a natural person on whose behalf a transaction is

Tender Reference No.:		[insert
identification no] Name of the	Tender Title/Description:	[insert name
of the assignment] to:	[insert complete name of Pr	ocuring Entity]

In response to the requirement in your notification of award dated *_[insert date of notification of award]* to furnish additional information on beneficial ownership: *_[select one option as applicable and delete the options that are not applicable]*

i) We here by provide the following beneficial ownership information.

Details of beneficial ownership

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

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	Details of all Beneficial Owner	rs % of shares a person holds in the company Directly or indirectly	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes / No)	Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)
	Residential address				exercised directly or
	Telephone number			Indirect	indirectly?
	Email address				Direct
	Occupation or profession				
					Indirect
	1	P		1	
2.	Full Name National identity card number or Passport number Personal Identification Number (where applicable) Nationality(ies) Date of birth	Directly % of shares Indirectly % of shares	Directly% of voting rights Indirectly% of voting rights	 Having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer: Yes No Is this right held directly or indirectly?: 	 Exercises significant influence or control over the Company body of the Company (tenderer) YesNo
	[dd/mm/yyyy] Postal address			Direct	control exercised
	Residential address				directly or indirectly?
	Telephone number			Indirect	-
	Email address				Direct
	Occupation or profession				Indirect
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3.					
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- *ii*) Am fully aware that beneficial ownership information above shall be reported to the Public Procurement Regulatory Authority together with other details in relation to contract awards and shall be maintained in the Government Portal, published and made publicly available pursuant to Regulation 13(5) of the Companies (Beneficial Ownership Information) Regulations, 2020.(Notwithstanding this paragraph Personally Identifiable Information in line with the Data Protection Act shall not be published or made public). Note that Personally Identifiable Information (PII) is defined as any information that can be used to distinguish one person from another and can be used to deanonymize previously anonymous data. This information includes National identity card number or Passport number, Personal Identification Number, Date of birth, Residential address, email address and Telephone number.
- iii) In determining who meets the threshold of who a beneficial owner is, the Tenderer must consider a natural person who in relation to the company:
 - (a) holds at least ten percent of the issued shares in the company either directly or indirectly;
 - (b) exercises at least ten percent of the voting rights in the company either directly or indirectly;
 - (c) holds a right, directly or indirectly, to appoint or remove a director of the company; or
 - (d) exercises significant influence or control, directly or indirectly, over the company.

iv)What is stated to herein above is true to the best of my knowledge, information and belief.

Name of the Tenderer:*[insert complete name of the Tenderer]_____

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

name of person duly authorized to sign the Tender]

signing the Tender]

Signature of the person named above: [insert signature of person whose name and

capacity are shown above]

Date this [insert date of signing] day of...... [Insert month], [insert year]

Bidder's Official Stamp

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SUPERVISION CHECKLIST

Superv	vision Cl	neck I	<u>list</u>																								
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		timely												

4	Personele		Workers and																
-	mployme		operators are												-		-		
	nt		deployed in				_	+ +			-				+	+	-		
	III	4-1	accordance																
		4-1																	
			with Works																
			Execution																
			Programme												_				
			Wage					+									_		
			payment is																
		4-2	properly																
			made on																
			time																
5	Site base		Office and																
	facilities		stockyard																
			are prepared																
		5-1	in																
		5-1	accordance																
			with Works																
			Execution																
			Programme																
			Site is well																
			maintained																
			during the																
		5.0	work																
		5-2	execution																
			and cleared																
			on																
			completion																
			Material																
			stored on site																
		5-3	is properly					\uparrow				\square							
			managed																
			during the										1		1				
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			work				Т				Т		Т		П				
			execution																
6	Quality		Material					+	+		+					+			
0	and		testing,																
	quantity		structural																
	managem		examination,								_						-		
	ent		and								_						-		
	CIII		measuremen																
			ts are																
		6-1	properly and																
		0-1	PERIODICI																
			y conducted																
			based on																
			specification																
			s and Works																
			Execution																
			Programme																
			Results of																
			material																
			testing,																
			structural																
			examination																
		6-2	and																
			measuremen																
			ts are within																
			the																
			specification																
			s.																
			Results of																
1			material													++			
		6-3	testing,																
			structural																
			examination,																
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		1	and											
			measuremen											
			ts are											
			properly											
			compiled as											
			reports for											
			confirmation											
7	Work		Understandi											
	schedulin		ng of critical											
	g	7-1	path and its											
		/-1	reflection on											
			scheduling is											
			proper											
			Actual			11								
			proceedings										-	
			are											
			periodically											
			compared to											
		7-2	the planned											
		1-2	schedule											
			described in											
			Works											
			Execution											
			Programme			 ++								
			Changes									_	-	
			caused by											
			site											
		7-3	conditions											
		1-5	are properly											
			handled to											
			keep things											
			on schedule											
		7-4						·						
L	l .			_		_								1

		All works																	· · · · · · · · · · · · · · · · · · ·
		are																	
		completed																	
		within the																	
		contract term																	
		or within the																	
		extended																	
		term as																	
		allowed																	
Work		No accident																	
safety		occurs to																	
managem	8-1	workers,																	
ent		operators, or																	
		third-parties.																	
		Safety of																	
	8-2	workers and																	
	° -	operators is																	
		considered										_							
		Accident										_						-	
		prevention																-	
	8-3	efforts for																	
		third-parties																	
		are proper					_				_	_					_		
		Traffic and				_						_			_			-	
		site safety					_				_	_					_	-	
	8-4	devices are																	
		properly																	
		installed and																	
		managed		 +	$\left \right $	+	+	$\left \cdot \right $	_	+	 +	+	+ +	_		$\left \right $	+		ļ
		Temporary facilities				+	_	\vdash			_	_	+			$\left \right $			
	8-5					+	_	\vdash		+		_	+			$\left \right $			
		(e.g. scaffolding)																	
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			are constantly																					
			checked																					
9	Environm		Environment																					
	ental and		al and social																					
	social		mitigation																					
	managem		efforts (e.g.																					
	ent	9-1	against																					
			noise, vibration,																					
			emission,																					
			and dust) are																					
			conducted																					
			Waste																					
			material																					
		9-2	from site is																					
			properly																					
			disposed		_		_				-					_					 			
			Damage to existing		-								_					_		-				
			roads, works				+									_	_			-				
			and services																					
		9-3	is avoided or																					
			are repaired																					
			when it																					
			occurs				_																	
			No																_					
			overloading		-	\vdash	_	$\left \right $	-+	$\left \right $		\square	+		+			+	_					
		9-4	for work- related																					
			vehicles is																					
			reported																					
							1						\uparrow			1	\uparrow							
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