



Kenya National Highways Authority

Quality Highways, Better Connections

TENDER No. KeNHA/2717/2023

TENDER DOCUMENT

FOR

**CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B:
MURANGA COUNTY**

SEPTEMBER, 2023

**DIRECTOR (DEVELOPMENT)
KENYA NATIONAL HIGHWAYS
AUTHORITY
P.O. BOX 49712-00100
NAIROBI**

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INVITATION TO TENDER

TENDER NO. KENHA/2717/2023

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B

The Kenya National Highways Authority (KeNHA) invites sealed tenders for the construction of Mau Mau Lot 2B. The Mau Mau Lot 2B Road Development Project involves the Construction of;

- i. Upgrading to bitumen standards of JCT C538 (D421) Mitarakwa - JCT C536 Ha Paulo -Mbari ya Hiti - JCT B23 Gatuya, Mbari Ya Hiti-Gitige Road – 15 Km
- ii. Upgrading to bitumen standards of JCT C536 Githambo – Nduruini – Matharite – JCT E2144 Githiga, JCT C536 Kahatia – Nduruini E2144 Road – 16Km

The completion time is **36 calendar months** and a **defects notification period of 24 months** and will be funded through the Government of Kenya, Development Vote.

SCOPE OF WORK

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

QUALIFICATIONS FOR TENDERING

Mandatory Requirements

QUALIFICATION FOR TENDERING

Mandatory Requirements

The following **MUST** be submitted together with the bid;

1. Copy of Certificate of Incorporation or Certificate of Compliance for Foreign Contractors
2. Copy of **Valid** Annual Practicing License with the National Construction Authority in the classes specified above.
3. Copy of **Valid** Tax Compliance Certificate (Will be verified on the KRA TCC checker)
4. Duly filled Confidential Business Questionnaire.
5. Copy of recent CR 12 form provided by the Registrar of Companies during the time of registration or its equivalent for international firms that shows the list of directors'/ownership structure. (Issued within the last Six (6) months from the Tender Opening Date).
6. Power of Attorney.
7. An Unconditional Demand Bank Guarantee Tender Security of **Kshs 25,000,000.00** as per requirements in the bid document.
8. Duly signed Pre-Tender site visit certificate.
9. Current Sworn Affidavit on Litigation History (i.e. within three months of the tender opening date)
10. Declaration of Compliance from foreign contractors to source **at least forty percent** of their supplies from **citizen** contractors, suppliers or consultants.
11. All foreign contractors must enter into a Joint Venture (JV) with a Citizen Contractor where at least forty percent of work in terms of value shall be undertaken by a Citizen Partner. A fully registered JV agreement executed according to the Registration of Documents Acts must be submitted together with their tender. This requirement will form part of the Contract.
12. Bidders shall **sequentially serialize** all pages of the tender document submitted.

Please note that all pages of the tender documents submitted by bidders shall be sequentially serialized. 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.

Other Requirements

As specified in the tender document covering the following: -

1. Similar previous experience
2. Equipment holding as per Appendix 1
3. Professional and technical personnel
4. Current workload
5. Litigation history (Current Sworn Affidavit, i.e., within three months of the tender opening date)
6. The tender has been duly signed by the person lawfully authorized to do so through the Power of Attorney.
7. Eligibility
 - a) Only those bidders registered in the NCA 1 category as indicated in the tender document shall bid as a Single Domestic Bidder or as Lead Foreign Partner in a JV with a domestic partner.
 - b) Bidders with history of Non-performance (e.g., failure to complete the projects for the last three (3) Financial Years, notice of termination or termination of contracts in the last three (3) Financial Years will be disqualified.
 - c) For Joint Ventures (JV), evidence of a duly executed Joint Venture Agreement by both parties and registration of the same with the Registration of Documents Act.
 - d) 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.
 - e) Any form of canvassing will lead to disqualification.

Note:

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 Visit that will be held on Friday 6th October 2023, at 10:00 am at Githambo (near Githambo Tea factory).**

NOTE:

Every Bidder shall be represented by one Technical Person with a Minimum qualification of a Diploma in Civil/Highway Engineering.

The Individual MUST Bring along the following:

1. **Original ID/Passport and a CERTIFIED Copy**
2. **CERTIFIED Copy of Diploma/H. Dip./Degree Certificate**
3. **CERTIFIED Copy of Registration Certificate and proof of current subscription by EBK/KETRB/IET or equivalent from the bidder's country**
4. **Original Introductory letter bearing the Company letterhead and an Official Stamp authorizing them to represent the company in the pre-tender site visit and Pre-tender Conference. The letter shall be duly signed. Photocopies or any other media shall not be accepted.**

All required certified copies **SHALL** be certified by Commissioner of Oaths or Notaries Public.

The copies of ID/Passport, Academic Certificates, Professional Registration certificates, proof of current subscription and introductory letters shall be retained by the Procuring Entity's Team and may be verified later for authenticity.

The detailed tender notice is available on the KeNHA website and Public Procurement Information Portal (PIIP).

Bidders are encouraged to send any clarifications through the email addresses below during office hours (**Mondays to Fridays from 0800 to 1700 hours local time**), excluding holidays, to be received **on or before seven (7) days prior to the deadline of bid submission.**

Attention: Director (Development)
Procuring Entity: Kenya National Highways Authority
Physical address: Barabara Plaza, JKIA, Off Mazao Road (Opposite Aviation House)
Postal Address: P.O. Box 49712 – 00100, NAIROBI, KENYA
Floor/Room No.: 1st Floor North Wing, Block A
Telephone: +254 700423606, +254 20 4954329
Email addresses: procurement@kenha.co.ke; directordevelopment@kenha.co.ke

Interested eligible candidates may obtain further information and inspect tender documents from the **Procurement Office, Kenya National Highways Authority, Barabara Plaza, Jomo Kenyatta International Airport, Mazao Road, Off Airport North Road, Block C, Second Floor, from 26th September, 2023** during normal working hours.

A complete set of tender document may be obtained by interested tenderers from the Kenya National Highways Authority (KeNHA) website: www.kenha.co.ke or Public Procurement Information Portal (PIIP) website www.tenders.go.ke free of charge **or** from KeNHA Headquarters Office, Barabara Plaza, 2nd Floor Block C Supply Chain Department during normal working hours upon payment of non-refundable fee of Kshs, 1,000.00 (One thousands shillings only) in form of a banker's cheque payable to Kenya National Highways Authority.

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

**Deputy Director, Supply Chain Management
Kenya National Highways Authority,
Barabara Plaza, JKIA, Nairobi, Off Mazao Road (Opposite KCAA Headquarters)
Block C, Second Floor
P. O. Box 49712 - 00100,
NAIROBI, KENYA**

and deposited in the Tender Box at the Barabara Plaza, Block C, Second Floor, JKIA, Nairobi, Off Mazao Road (Opposite KCAA Headquarters), so as to be received on or before, **Thursday, 26th October, 2023 at 11.00 AM.**

All interested bidders are required to continually check the Kenya National Highways Authority website: www.kenha.co.ke or Public Procurement Information Portal (PIIP) website www.tenders.go.ke for any tender addendums or clarifications that may arise before the submission date.

Opening of the bids will take place on **Thursday, 26th October, 2023 at 11.00 AM** at **Block C, 2nd Floor Board Room, Barabara Plaza, JKIA, Nairobi, Off Mazao Road (Opposite KCAA Headquarters)**, in the presence of Tenderers/Representatives who wish to attend.

**Deputy Director, Supply Chain Management
For: DIRECTOR GENERAL**

PART 1 - TENDERING PROCEDURES

SECTION I – INSTRUCTIONS TO TENDERERS

A GENERAL PROVISIONS

1. Scope of Tender

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

2. Fraud and Corruption

- 2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 “Declaration not to engage in corruption”. The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.
- 2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the “Certificate of Independent Tender Determination” annexed to the Form of Tender.
- 2.3 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
 - ii) 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 in corrupt, coercive, obstructive or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified.
- 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 in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.

- 3.7 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 labor) from citizen suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity determine if this condition is met shall be provided for this purpose in “*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 less than 51 percent ownership by Kenyan citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.
- 3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.
- 3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the

website www.cak.go.ke.

- 3.14 A Kenyan tenderer shall 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. CONTENTS OF TENDER DOCUMENTS

6 Sections of Tender Document

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

PART 1: Tendering Procedures

Section I: Instructions to Tenderers

Section II: Tender Data Sheet (TDS)

Section III: Evaluation and

Qualification Criteria

Section IV: Tendering

Forms

PART 2: Works' Requirements

Section V: Bills of Quantities

Section VI: Specifications

Section VII: Drawings

PART3: Conditions of Contract and Contract Forms

Section VIII: General Conditions (GCC)

Section IX: Particular Conditions of Contract

Section X: Contract Forms

- 62 The Invitation to Tender Notice issued by the Procuring Entity is not part of the Contract documents.
- 63 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.
- 64 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 A Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the Procuring Entity's address **specified in the TDS** or raise its enquiries during the pre-Tender meeting if provided for in accordance with ITT 7.2. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received no later than the period specified in the **TDS** prior to the deadline for submission of tenders. The Procuring Entity shall forward copies of its response to all tenderers who have acquired the Tender 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 Winning Tender 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, except in cases where the contract is subject to fluctuations and adjustments, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.
- 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, in sufficient 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 III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.
- 17.3 If a margin of preference applies as specified in accordance with ITT 33.1, 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, a particular contract or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and there by help to prevent any corrupt influence in relation to the procurement process or contract management.
- 17.5 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 tenderer 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) cash;
 - ii) a bank guarantee;
 - iii) a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority; or
 - iv) a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya, from a reputable source, and an eligible country.
- 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.
- 19.5 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 there to 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.
- 20.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 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 initialed 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 initialed 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 described in ITT 11; and
- b) in an envelope or package or container marked "COPIES" all required copies of the Tender; and
- c) if alternative Tenders are permitted in accordance with ITT 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**.

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

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.

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

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 initialed 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 non-conformities in the tender.
- 30.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial non- conformities in the tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.
- 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, sub-total 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.
- 33.2 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

- 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 intender evaluation.
- 35.4 Where the tender involves multiple lots or contracts, the tenderer will be allowed to tender for one or more lots (contracts). Each lot or contract will be evaluated in accordance with ITT 35.2. The methodology to determine the lowest evaluated tenderer or tenderers based one lot (contract) or based on a combination of lots (contracts), will be specified in Section III, Evaluation and Qualification Criteria. In the case of multiple lots or contracts, tenderer will be will be required to prepare the Eligibility and Qualification Criteria Form for each Lot.

36. Comparison of Tenders

- 36.1 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 &

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 may accept or not accept the tender depending on the Procuring Entity's budget considerations.
 - ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.
- 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 who's 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 Notification of Intention to Enter into a Contract/Notification of award to all tenderers which shall contain, at a minimum, the following information:

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

44. Stand still Period

42.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 7 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.

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

45. Debriefing by the Procuring Entity

45.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 43, an unsuccessful tenderer may make a concerns 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 seven 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 contracts 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 and Administrative Review

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

50.2 A request for administrative review shall be made in the form provided under contract forms.

Section II - Tender Data Sheet (TDS)

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

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
A. General	
ITT 1.1	<p>The name of the contract is CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANGA COUNTY</p> <p>The reference number of the Contract is Tender No. KeNHA/2717/2023</p> <p>The number and identification of lots (contracts) comprising this Tender are N/A</p>
ITT 2.4	The Information made available on competing firms is as follows: NONE
ITT 2.4	<p>The firms that provided consulting services for the contract being tendered for are:</p> <p style="text-align: center;">NONE</p>
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: Two (2).
B. Contents of Tender Document	
ITT 7.1	<p>(i) The Tenderer will submit any request for clarifications in writing at the Address</p> <p>Procuring Entity: Kenya National Highways Authority Physical address: Barabara Plaza, Block A&C, JKIA, Off Airport South Road, along Mazao Road Postal Address: P.O. Box 49712 – 00100, NAIROBI, KENYA Email addresses: directordevelopment@kenha.co.ke ; procurement@kenha.co.ke</p> <p>to reach the Procuring Entity not later than seven (7) days prior to the deadline of bid submission.</p> <p>(ii) The Procuring Entity will publish its response at the website www.kenha.co.ke</p>
ITT 7.2	<p>A) A MANDATORY Pre-Tender Site Visit will be held on Friday 6th October 2023, at 10:00 am at Githambo (near Githambo Tea factory).</p> <p>(B) Pre-Tender meeting “<i>shall not</i>” take place at the following date, time and place: N/A</p>
C. Preparation of Tenders	
ITT 11.1 (h)	<p>The Tenderer shall submit the following additional documents in its Tender: As indicated in the long tender notice.</p> <p>As a minimum, Bidders shall provide latest information set out below and As indicated in the long tender notice:</p>

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	<ol style="list-style-type: none"> 1. Evidence of access to lines of credit and availability of other financial resources 2. Financial predictions for the current year and the two subsequent years, including the effect of known commitments 3. Current work commitments 4. Current litigation information; and 5. Availability of critical equipment 6. Availability of key technical personnel 7. Similar work experience 8. History of non performing contracts 9. Details of sub-contractors if any
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(a)	<p>Foreign currency requirements allowed/not allowed.</p> <p>The rates of exchange shall be those published by <u>Central Bank of Kenya mean exchange rate as on the date 18th October, 2023 (7 days before date of Tender opening).</u></p>
ITT 18.2	The Tender validity period shall be 147 days from the specified date of opening as indicated in the invitation to Tender
ITT 18.3	<p>a) The Number of days beyond the expiry of the initial tender validity period will be <u>30</u> days.</p> <p>(b) The Tender price shall be adjusted by the following percentages of the tender price:</p> <p>(i) By <u>0</u> % of the local currency portion of the Contract price adjusted to reflect local inflation during the period of extension, and</p> <p>(ii) By <u>0</u> % the foreign currency portion of the Contract price adjusted to reflect the international inflation during the period of extension.</p>
ITT 19.1	<p>A Tender Security Shall be required. The amount and currency of the Tender Security shall be Kshs. 25,000,000.00 and in case of JV the above requirement shall be co-owned).</p> <p>A Tender-Securing Declaration <i>shall not be</i> required.</p>
ITT 20.1	In addition to the original of the Tender, the number of copies is: NONE
ITT 20.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: Certificate of Independent Tender Determination Part B of Form of Tender

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
D. Submission and Opening of Tenders	
ITT 21.2	A tender package or container that cannot fit in the tender box shall be received as follows: _ Deputy Director, Supply Chain Management, Kenya National Highways Authority, Barabara Plaza, JKIA, Off Mazao Road (Opposite, 2nd Floor Block C.
ITT 22.1	<p>(A) For <u>Tender submission purposes</u> only, the Procuring Entity's address is:</p> <p>Attention: Deputy Director, Supply Chain Management Procuring Entity: Kenya National Highways Authority Physical address: Barabara Plaza, JKIA, Off Mazao Road (Opposite Aviation House) Postal Address: P. O. Box 49712-00100, NAIROBI, KENYA Floor/Room No.: 2nd Floor Block C, Supply Chain Management Office Telephone: +254 700423606, +254 20 4954329 Email addresses: procurement@kenha.co.ke; directordevelopment@kenha.co.ke</p> <p>Date and time for submission of Tenders: 26th October, 2023 at 1100 Hrs</p> <p>Tenders shall not submit electronically.</p>
ITT 25.1	<p>The Tender opening shall take place at the time and the address for Opening of Tenders provided below:</p> <p>Name of Procuring Entity: Kenya National Highways Authority Physical address: Barabara Plaza, JKIA, Off Mazao Road (Opposite Aviation House) 2nd Floor Block C, Supply Chain Management Office</p> <p>Date and time of tender opening: 26th October, 2023 at 1100 Hrs</p>
ITT 25.1	<p>If Tenderers are allowed to submit Tenders electronically, they shall follow the electronic tender submission procedures specified below:</p> <p style="text-align: center;"><u>NONE</u></p>
ITT 25.6	<p>The Form of Tender and priced Bills of Quantities shall be initialed by representatives of the Procuring Entity attending Tender opening.</p> <p>If initialization is required, it shall be conducted as follows:</p> <ul style="list-style-type: none"> • By all members of the Tender opening committee • Form of Bid and Summary page of the BOQs
E. Evaluation, and Comparison of Tenders	
ITT 30.3	The adjustment shall be based on the _____ <i>average</i> _____ 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:

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	more than ____0____ % or less than ____0____ %.
ITT 32.1	<p>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: <u>Kenya Shillings</u></p> <p>The source of exchange rate shall be: The Central bank of Kenya</p> <p>The date for the exchange rate shall be: 7 days before the deadline date for Submission of the Tenders.</p> <p><i>For comparison of Tenders, the Tender Price, corrected pursuant to ITT 31, shall first be broken down into the respective amounts payable in various currencies by using the selling exchange rates specified by the Tenderer in accordance with ITT 15.1.</i></p> <p><i>In the second step, the Procuring Entity will convert the amounts in various currencies in which the Tender Price is payable (excluding Provisional Sums but including Daywork where priced competitively) to the single currency identified above at the selling rates established for similar transactions by the authority specified and, on the date, stipulated above.</i></p>
ITT 33.2	A margin of preference <i>shall</i> apply as provided in PPAD Act 2015 and Regulations 2020
ITT 34.1	At this time, the Procuring Entity <i>Does not intend</i> to execute certain specific parts of the Works by subcontractors selected in advance.
ITT 34.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: 40 % of the total contract amount. Tenderers planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity (ies) or parts of the Works to be subcontracted along with complete details of the subcontractors and their qualification and experience.
ITT 34.3	<p>The parts of the Works for which the Procuring Entity permits Tenderers to propose Specialized Subcontractors are designated as follows:</p> <p><u>N/A</u></p>
ITT 35.2 (e)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.
ITT 48.2	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.
ITT 50.1	<p>The procedures for making a Procurement-related Complaint are available from the PPRA website info@ppra.go.ke or complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to:</p> <p>For the attention: Eng. Kungu Ndungu</p> <p>Title/position: Director General</p>

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	<p>Procuring Entity: Kenya National Highways Authority</p> <p>Email address: dg@kenha.co.ke</p> <p>In summary, a Procurement-related Complaint may challenge any of the following:</p> <ul style="list-style-type: none"><li>(i) the terms of the Tender Documents; and<li>(ii) the Procuring Entity's decision to award the contract.

SECTION III- EVALUATION AND QUALIFICATION CRITERIA

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 **the Standard Tender Evaluation Document for Goods and Works** for evaluating Tenders.
- 1.2 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 irresponsible and will not be considered further.

- a) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.
 - i. The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow of equivalent to **Kshs. 300,000,000.00** (In case of JV, Domestic partner to provide a line of credit or capacity of cash flow requirement of **Kshs. 200,000,000**).

- ii. Minimum average annual construction turnover of Kenya Shillings 1,000,000,000.00, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 5 years, divided by 1 year (In case of JV, the domestic partner is required to demonstrate the Average Annual Turnover of **Kshs. 400,000,000** for the same period)
- iii. At least 2. No. of contract(s) of a similar nature executed within Kenya, or the East African Community, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value Kenya shillings 2.5 billion equivalent, among which, at least 1. No. of contract of a similar nature have been satisfactorily and substantially completed as a prime contractor, or joint venture member within the East African Region.
- iv. Contractor's Representative and Key Personnel, which are specified as indicated
- v. Contractors key equipment listed on the table "Contractor's Equipment" below and more specifically listed as [specify requirements for each lot as applicable]
- vi. Other conditions depending on their seriousness.

3. ASSESSMENT OF ADEQUACY OF TECHNICAL PROPOSAL WITH REQUIREMENTS (IF APPLICABLE)

The Procuring Entity will evaluate the Technical Proposals of all unresponsive tenders using the following criteria, sub-criteria, and point system for the evaluation of the Technical Proposals:

- i) History of non-performance
- ii) Financial capability
- iii) General and specific experience
- iv) Key personnel
- v) Contractors Plant and Equipment
- vi) Adequacy and quality of the proposed methodology, and work plan in responding to the schedule of Requirements:

Total points for the five criteria: 100 points. The minimum technical score (St) required to pass is: 75points.

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

4. 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;** if permitted under ITT 35.2(d)

:.....N/A.....

5. Multiple Contracts

- 5.1 Multiple contracts will be permitted in accordance with ITT 35.4. Tenderers are evaluated on basis of Lots and the lowest evaluated tenderer identified for each Lot. The Procuring Entity will select one Option of the two Options listed below for award of Contracts.

OPTION 1

- i) If a tenderer wins only one Lot, the tenderer will be awarded a contract for that Lot, provided the tenderer meets the Eligibility and Qualification Criteria for that Lot.
- ii) If a tenderer wins more than one Lot, the tender will be awarded contracts for all won Lots, provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the Lots. The tenderer will be awarded the combination of Lots for which the tenderer qualifies and the others will be considered for award to second lowest the tenderers.

OPTION 2

The Procuring Entity will consider all possible combinations of won Lots [contract(s)] and determine the combinations with the lowest evaluated price. Tenders will then be awarded to the Tenderer or Tenderers in the combinations provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won Lots.

6. Alternative Tenders (ITT 13.1)

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

The Procuring Entity shall consider Tenders offered for alternatives as specified in 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

7. MARGIN OF PREFERENCE

- 7.1 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%).
- 7.2 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 or group of contractors qualifies for a margin of preference.
- 7.3 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) GroupA: tenders offered by Kenyan Contractors and other Tenderers where Kenyan citizens hold shares of over fifty one percent (51%).
 - ii) GroupB: tenders offered by foreign Contractors and other Tenderers where

Kenyan citizens hold shares of less than fifty one percent (51%).

- 74 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 B and 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.

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

- a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.
- b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.
 - i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow of **Kshs 300,000,000.00 (In case of JV, Domestic partner to provide a line of credit or capacity of cash flow requirement of Kshs. 200,000,000).**
 - ii) Minimum average annual construction turnover of **Kshs. 1 B (One Billion)** equivalent calculated as total certified payments received for contracts in progress and/or completed within the last **3 years, divided by 1 year.** (In case of JV, the domestic partner is required to demonstrate the Average Annual Turnover of **Ksh. 400 million (Four Hundred Million)** for the same period)
 - iii) At least **2. No. of contract(s) of a similar nature** executed within Kenya, or the East African Community or abroad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value **Kshs 2.5 Billion equivalent, among which, at least 1. No. of contract of a similar nature have been satisfactorily and substantially completed as a prime contractor, or joint venture member within Kenya.**
 - iv) Contractor's Representative and Key Personnel, which are specified as indicated.
 - v) Contractors' key equipment listed on the table "Contractor's Equipment" below and more specifically listed as indicated in the table.
 - vi) Other conditions depending on their seriousness.
- a) **History of non-performing contracts:**
Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the **last 10 years.** The required information shall be furnished in the appropriate form.
- b) **Pending Litigation**
Financial position and prospective long-term profitability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall

remain sound according to criteria established with respect to Financial Capability under Paragraph (i) above if all pending litigation will be resolved against the Tenderer. Tenderer shall provide information on pending litigations in the appropriate form.

c) **Litigation History**

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the **last 10 years**. All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the years specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender

9. QUALIFICATION FORM SUMMARY

1 Item No.	2 Qualification Subject	3 Qualification Requirement	4 Document To be Completed by Tenderer	5 For Procuring Entity's Use (Qualification met or Not Met)
A. PRELIMINARY EVALUATION				
1	Nationality	Nationality in accordance with ITT 3.6	Forms ELI – 1.1 and 1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by Kenya Revenue Authority in accordance with ITT 3.14.	Attachment	
3	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Form of Tender	
4	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.7	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.8	Forms ELI – 1.1 and 1.2, with attachments	
6.	Appendix to Form of Bid	Form properly filled & signed	Appendix to Form of Bid in the Prescribed Format	
7	Goods, equipment and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 4.1	Forms ELI – 1.1 and 1.2, with attachments	
8	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default since 1st January 2013 . Non-performance shall be deemed to have occurred by evidence of; <ul style="list-style-type: none"> • <i>Termination letter</i> • <i>Liquidated damages</i> 	Form CON-2	
9	Suspension Based on Execution of Tender/Proposal Securing Declaration by the Procuring Entity	Not under suspension based on-execution of a Tender/Proposal Securing Declaration pursuant to ITT 19.9	Form of Tender	
10	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to criteria established in 3.1 and assuming that all pending litigation will NOT be resolved against the Tenderer.	Form CON – 2	
11	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer since 1st January 2013	Form CON – 2	
12	Tender Security	Tender Securing document	Form in the Prescribed Format	
13	Priced Bill of Quantities	Form dully filled; No errors noted in the Bills of Quantities	Bills of Quantity in the Prescribed Format	

1	2	3	4	5
Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
14	Registration with National Construction Authority	-Proof of registration with National Construction Authority as per Invitation to Bid letter -Valid Annual Practising license	- Copy of registration with National Construction Authority -Valid Annual Practising license	
15	Source 40% of supplies from citizens if foreign firm	Declaration of compliance	-ITT 3.10, Form Foreign Tenderers 40% Rule	
16.	Serialization of the Bid	Bidders shall sequentially serialize all pages of each tender submitted. Any written pages or document attached or inserted Documents <u>MUST</u> be sequentially serialized.	The Serialization <u>MUST</u> be numerically sequential starting from Numeric 1.	
B. TECHNICAL EVALUATION				
1	Financial Capabilities	(i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated to equivalent of Kshs. 300,000,000.00 (In case of JV, Domestic partner to provide a line of credit or capacity of cash flow requirement of Kshs. 200,000,000). (ii) The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments. (iii) The audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last 3 years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability. In case of a JV, both partners are required to submit financial statements)	Form FIN – 3.1, with attachments	8 MKS
2	Average Annual Construction Turnover	Minimum average annual construction turnover of Kshs. 1 B (One Billion) , equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 3 years , divided by 1 year. (In case of JV, the domestic partner is required to demonstrate the Average Annual Turnover of Ksh. 400 Million (Four hundred million) for the same	Form FIN – 3.2	2 MKS

1	2	3	4	5
Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		period)		
3	Ongoing Works	The total value of outstanding works on the ongoing contracts should not exceed the average annual turnover for the last 3 years. A bidder with ongoing works that are more than 10% behind schedule on respective approved Works Program or time for completion will not be considered competitive.		2 MKS
3	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last 5 years , starting 1st January 2018 . Grading shall be based on general projects handled. Five projects and above earns maximum points and prorated downwards (In case of JV, the Lead Partner will be required to attain the above requirement).	Form EXP – 4.1	5 MKS
4	Specific Construction & Contract Management Experience	A minimum number of 2 similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, management contractor or sub-contractor between 1st January 2018 and tender submission deadline i.e. Two (2) contracts, each of minimum value Kshs. 2 B. Equivalent . (In case of JV, Combined parties will be required to attain the above requirement). The similarity of the contracts shall be based on the following: <i>[Based on Section VII, Scope of Works, specify the minimum key requirements in terms of physical size, complexity, construction method, technology and/or other characteristics including part of the requirements that may be met by specialized subcontractors, if permitted in accordance with ITT 34.3]</i>	Form EXP 4.2(a)	10 MKS
5	Contractor's Key Plant and Equipment	The Bidder must indicate the core plant and equipment considered by the company to be necessary for undertaking the project together with proof of ownership or active lease arrangements. (*Mandatory minimum number of equipment required by the Employer for the execution of the project that the bidder must make available for the Contract. *)	As indicated in Schedule A: Contractor's Key Plant & Equipment below	20 MKS
6	Contractor's Representative and Key Personnel	Curriculum Vitae (CVs) of the Proposed Key Staff must be presented in the provided format and duly signed by the proposed individual. Copies of certificates and Annual Practising Licenses (for engineers) and	As indicated in Schedule B: Key Personnel below and	18 MKS

1	2	3	4	5
Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		academic certificates for all staff is mandatory	Forms PER-1 and PER-2	
7	Construction methodology and management	Submission of work methodology in accordance with ITT 5.4 <ul style="list-style-type: none"> Detailed and well-resourced program of works Work methodology detailing execution ways of execution of the works Equipment scheduling methodology for the different various activities Proposal on Quality Assurance System Site Organization and staffing 		20 MKS
8	Environmental & Social impact requirements	<ul style="list-style-type: none"> Proposed Environmental mitigation measures Proposed Social mitigation measures 		5MKS
9	Health and safety Plan	<ul style="list-style-type: none"> Methodology on road safety and security management during construction Public health and occupational health 		5MKS
10	Knowledge Transfer	<ul style="list-style-type: none"> Participation by Kenyan citizens among proposed Key Experts 		5MKS
C.	FINANCIAL EVALUATION The lowest evaluated bidder may be subjected to Financial Evaluation which include but not limited to sensitivity analysis of the rates and meeting the requirements of TDS-ITT36.1			
D.	POST QUALIFICATION: The procuring Entity may verify the documents provided by the bidder with the issuing authority.			

A. Schedule of Contractor's Equipment					
Equipment Details	Quantity (No) (Minimum)	Marks (Score)		No. of Equipment to be made available for the Contract by the Bidder	Evaluation Marks Awarded
		No. of Equipment Owned by the Bidder	No. of Equipment to be hired/ purchased by the Bidder		
A. General Plant Primary/Secondary Crusher Unit/Power Screen Min capacity – 90t/hr. Concrete batching plant Min Cap 30 m3/hr	1 1	2 mark for each equipment owned	0.5 mark for each equipment hired		Meets all Requirements: Yes – 4 Points
B. Compactors Vibrating compaction plate 300 mm wide Vibrating compaction plate 600 mm wide	2 1	1 mark for each equipment owned	0.5 mark for each equipment owned		Meets all Requirements: Yes – 3 Points
C. Mobile Compressors Single tool (1.8 m3/min) Two tool (2.8 – 7.3 m3/min) Four tool (11.3 – 25.3 m3/min) Medium rock drill (1.5 m3/min) Heavy rock drill (2.4 m3/min)	1 2 1 1 1	0.5 mark for each equipment owned	0.25 mark for each equipment owned		Meets all Requirements: Yes – 3 Points
D. Concrete Equipment i. Mobile concrete mixers ii. Truck mounted mixers iii. Concrete vibrators	4 1 5	0.5 mark for each equipment owned	0.25 mark for each equipment owned		Meets all Requirements: Yes – 5 Points

E. Transport (Tippers, dumpers, water tankers) 4X2 tippers payload 7 – 12 tonnes 6X4 tippers payload 16 – 20 tonnes 8X4 tippers payload 16 – 20 tonnes Articulated trailers Dump trucks Flatbed lorries Water tankers (18,000 – 20,000 lts. capacity)	 5 2 2 2 4 2 4	1 mark for each equipment owned	0.5 mark for each equipment owned		Meets all Requirements: Yes – 21 Points No – 0 Points
F. Earth – Moving Equipment Tractor dozers with dozer attachment (D6-D9 equivalent) Front End loaders Wheeled loaders Motor graders (93 - 205kW) Trench excavator	 2 4 4 4 1	1 mark for each equipment owned	0.5 mark for each equipment owned		Meets all Requirements: Yes – 15 Points
G. Diesel Generators Diesel generators (15 – 200Kva)	 3	0.5 mark for each equipment owned	0.25 mark for each equipment owned		Meets all Requirements: Yes – 1.5 Points

H. Excavators Hydraulic crawler mounted (7 – 10 tonnes) – 0.25 – 0.4 m3 SAE bucket. Hydraulic crawler mounted (10 – 16 tonnes) – 0.40 – 0.60 m3 SAE bucket. Hydraulic wheel mounted (7 – 10 tonnes) – 0.25 – 0.4 m3 SAE bucket. Hydraulic wheel mounted (10 – 16 tonnes) – 0.40 – 0.6 m3 SAE bucket. Hydraulic wheel mounted backloader (7 – 10 tonnes) – 0.25 – 0.4 m3 SAE bucket.	2 2 4 2 2	1 mark for each equipment owned 	0.5 mark for each equipment owned 		Meets all Requirements: Yes – 12 Points
I. Rollers Self-propelled single drum vibrating (various types) Sheep’s foot roller Double drum vibrating pedestrian rollers	3 1 3	1 mark for each equipment owned 	0.5 mark for each equipment owned 		Meets all Requirements: Yes – 7 Points
J. Bituminous Plants Bitumen Pressure distributor Chip spreader	1 1	1 mark for each equipment owned 	0.5 mark for each equipment owned 		Meets all Requirements: Yes – 2 Points

Total Score = 73.5

*Score for Construction Equipment= (X/73.5) *20*

We hereby certify that notwithstanding the list of plant and equipment detailed above, we will provide sufficient, suitable and adequate plant in good working condition for the successful completion of works.

Signature of Contractor.....

Date.....

The Bidder shall provide details of the proposed personnel and their experience records using Forms PER-1 and PER-2 included in Section IV, Bidding Forms.

Schedule B. Contractor's Key Personnel					
No.	Position	Minimum academic and professional qualifications or provide equivalent	General Work experience (years)	Specific Work experience (years)	Evaluation Marks Awarded
1	Project Manager	Bachelor's Degree in Civil Engineering or equivalent and is Registered as a professional member with relevant professional body	15	10	Meets all Requirements: Yes – 3 Point No – 0 Points
2	Site Agent	Bachelor's Degree in Civil Engineering or equivalent and is Registered as a professional member with relevant professional body	12	8	Meets all Requirements: Yes – 3 Point No – 0 Points
3	Site Engineer	Bachelor's Degree in Civil Engineering or equivalent and is Registered as a professional member with relevant professional body	8	5	Meets all Requirements: Yes – 3 Point No – 0 Points
4	Senior Surveyor	Bachelor's Degree in Surveying or equivalent and is Registered as a professional member with relevant professional body	8	5	Meets all Requirements: Yes – 3 Point No – 0 Points
5	Environmental/ Safety Officer	Bachelor's Degree in Environmental Science or Equivalent	8	5	Meets all Requirements: Yes – 2 Point No – 0 Points
6	Senior Foreman	Higher National Diploma (HND) in Civil Engineering	10	8	Meets all Requirements: Yes – 2 Point No – 0 Points
7	Senior Materials Technologist	Higher National Diploma (HND) in Civil Engineering	10	8	Meets all Requirements: Yes – 2 Point No – 0 Points

All key staff shall work on site on a full time basis and shall be fluent orally and competent in reading and writing in the English language or interpreters/ translators shall be provided.

SECTION IV - TENDERING FORMS

QUALIFICATION FORMS

1. FOREIGN TENDERERS 40% RULE.
2. TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE
3. Form EQU: EQUIPMENT.
4. FORM PER -1.
5. FORM PER-2.
6. TENDERERS QUALIFICATION WITHOUT PRE-QUALIFICATION.
 - 6.1 FORM ELI-1.1.
 - 6.2 FORM ELI-1.2.
 - 6.3 FORM CON –2.
 - 6.4 FORM FIN –3.1.
 - 6.5 FORM FIN –3.2.
 - 6.6 FORM FIN –3.3.
 - 6.7 FORM FIN –3.4.
 - 6.8 FORM EXP -4.1.
 - 6.9 FORM EXP - 4.2(a).
 - 6.9 FORM EXP - 4.2 (a) (cont.).
 - 6.10 FORM EXP -4.2 (b).

OTHER FORMS

7. FORM OF TENDER.
8. FORM OF TENDER SECURITY - DEMAND BANK GUARANTEE.
9. FORM OF TENDER SECURITY (TENDER BOND).
10. FORM OF TENDER-SECURING DECLARATION.
11. APPENDIX TO TENDER.

TECHNICAL PROPOSAL FORMS

Site Organization.

Method Statement.

Mobilization

Schedule.

Construction

Schedule.

QUALIFICATION FORMS**1. FOREIGN TENDERERS 40% RULE**

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

ITEM	Description of Work Item	Describe location of Source	COST in Kenya Shillings	Comments, if any
A	Local Labor			
1				
2				
3				
4				
5				
B	Sub contracts from Local sources			
1				
2				
3				
4				
5				
C	Local materials			
1				
2				
3				
4				
5				
D	Use of Local Plant and Equipment			
1				
2				
3				
4				
5				
E	Add any other items			
1				
2				
3				
4				
5				
6				
	TOTAL COST LOCAL CONTENT			
	PERCENTAGE OF CONTRACT PRICE			

3. FORM EQU: EQUIPMENT

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

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

Omit the following information for equipment owned by the Tenderer.

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

4. FORM PER-1**Contractor's Representative and Key Personnel Schedule**

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

Contractor' Representative and Key Personnel.

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

5. Name of candidate

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

5. FORM PER-2:

Resume and Declaration - Contractor's Representative and Key Personnel

Name of Tenderer

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

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

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

DECLARATION

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

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

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

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

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

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

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Tenderer:

Signature: _____

Date: (day month year): _____

6. TENDERERS QUALIFICATION WITHOUT PRE-QUALIFICATION

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

61 FORM ELI-

1.1Tenderer Information

Form

Date: _____

ITT No. and title: _____

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

62 FORM ELI-1.2**Tenderer's JV Information Form***(To be completed for each member of Tenderer's JV)*

Date: _____

ITT No. and title: _____

Tenderer's JV name: _____

JV member's name: _____

JV member's country of registration: _____

JV member's year of constitution: _____

JV member's legal address in country of constitution: _____

JV member's authorized representative information

Name: _____

Address: _____

Telephone/Fax numbers: _____

E-mail address: _____

1. Attached are copies of original documents of

☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 43.6.

☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 3.8.

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

63 FORM CON – 2**Historical Contract Non-Performance, Pending Litigation and Litigation History**

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria

☐ Contract non-performance did not occur since 1st January *[insert year]* specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1.

☐ Contract(s) not performed since 1st January *[insert year]* specified in Section III, Evaluation and Qualification Criteria, requirement 2.1

Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and Kenya Shilling equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Procuring Entity: <i>[insert full name]</i> Address of Procuring Entity: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

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

☐ No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.

☐ Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
Litigation History in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4. <input type="checkbox"/> Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Procuring Entity: <i>[insert full name]</i> Address of Procuring Entity: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Procuring Entity" or "Contractor"]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

64 FORM FIN –3.1:**Financial Situation and Performance**

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

6.4.1. Financial Data

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

*Refer to ITT 15 for the exchange rate

642 Sources of Finance

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

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

643 Financial documents

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

- reflect the financial situation of the Tenderer or incase of JV member, and not an affiliated entity (such as parent company or group member).
- be independently audited or certified in accordance with local legislation.
- be complete, including all notes to the financial statements.
- correspond to accounting periods already completed and audited.

Attached are copies of financial statements ¹ for the _____ years required above; and complying with the requirements

6.5 FORM FIN – 3.2:

Average Annual Construction Turnover

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

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

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

6.6 FORM FIN –3.3:**Financial Resources**

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

6.7 FORM FIN–3.4:**Current Contract Commitments / Works in Progress**

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

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

6.8 FORM EXP -4.1

General Construction Experience

Tenderer's Name: _____

Date: _____

JV Member's Name: _____

ITT No. and title: _____

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

6.9 FORM EXP -4.2(a)

Specific Construction and Contract Management Experience

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

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

6.10 FORM EXP -4.2(b)

Construction Experience in Key Activities

Tenderer's Name: _____

Date: _____

Tenderer's JV Member Name: _____

Sub-contractor's Name² (as perITT34): _____

ITT No. and title: _____

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

1. Key Activity No One: _

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

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

- 2 Activity No. Two
- 3

OTHER FORMS**7. FORM OF TENDER*****INSTRUCTIONS TO TENDERERS***

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

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

Request for Tender No.: *[insert identification]* **Name and description of Tender** *[Insert as per ITT)* **Alternative No.:** *[insert identification No if this is a Tender for an alternative]*

To: *[insert complete name of Procuring*

Entity] Dear Sirs,

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

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

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

2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Particular Conditions of Contract.
3. We agree to adhere by this tender until _____ *[Insert date]*, and it shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive.
5. We, the undersigned, further declare that:
 - i) No reservations: We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 8;
 - ii) Eligibility: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;
 - iii) Tender-Securing Declaration: We have not been suspended nor declared ineligible by the

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

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

- (iv) **Conformity:** We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: *[insert a brief description of the Works]*;
- (v) **Tender Price:** The total price of our Tender, excluding any discounts offered in item 1 above is: *[Insert one of the options below as appropriate]*
- (vi) **Option1**, incase of one lot: Total price is: *[insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies]*; Or

Option2, in case of multiple lots:

- a) *Total price of each lot* *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*; and
- b) *Total price of all lots* (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;
- vii) **Discounts:** The discounts offered and the methodology for their application are:
- viii) The discounts offered are: *[Specify in detail each discount offered.]*
- ix) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;
- x) **Tender Validity Period:** Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1(as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- xi) **Performance Security:** If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;
- xii) **One Tender Per Tender:** We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT3.4, other than alternative Tenders submitted in accordance with ITT 13.3;
- xiii) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, Engineer, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.
- xiv) **State-owned enterprise or institution:** *[select the appropriate option and delete the other]* *[We are not a state- owned enterprise or institution]/[We are a state-owned enterprise or institution but meet the requirements of ITT 3.7]*;
- xv) **Commissions, gratuities, fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

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

- xvi) **Binding Contract:** We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- xvii) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other. Tender that you may receive;
- xviii) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;
- xix) **Collusive practices:** We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the “Certificate of Independent Tender Determination” attached below.
- xx) **Code of Ethical Conduct:** 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.
- xxi) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:
- Tenderer's Eligibility; Confidential Business Questionnaire – to establish we are not in any conflict to interest.
 - Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.
 - Self-Declaration of the Tenderer– to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
 - Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal.

Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in

“Appendix 1- Fraud and Corruption” attached to the Form of Tender.

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

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

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

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

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

Date signed _____ day of _____, _____

Notes

* In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer

** Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender,

A. TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE**Instruction to Tenderer**

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

i) Tenderer's details

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

General and Specific Details

ii) Sole Proprietor, provide the following details.

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

iii) Partnership, provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

(iv) Registered Company, provide the following details.

- i) Private or public Company _____
- ii) State the nominal and issued capital of the Company
Nominal Kenya Shillings (Equivalent).....
Issued Kenya Shillings (Equivalent).....
- iii) Give details of Directors as follows.

	Names of Director	Nationality	Citizenship	% Shares owned
1				
2				
3				

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

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

If yes, provide details as follows.

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

ii) Conflict of interest disclosure

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

Certification

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

Full Name_____

Title or Designation_____

(Signature)

(Date)

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

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

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

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

Name _____

Title _____

Date _____

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

SELF-DECLARATION FORMS

FORM SD1

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

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

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

.....

 (Title) (Signature) (Date)

Bidder Official Stamp

FORM SD2

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

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

1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of
..... (*insert name of the Company*) who is a Bidder in respect of Tender No.
..... for (*insert tender title/description*) for
(*insert name of the Procuring entity*) and duly authorized and competent to make this statement.
2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of..... (*insert name of the Procuring entity*) which is the procuring entity.
3. THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of..... (*name of the procuring entity*)
4. THAT the aforesaid Bidder will not engage/has not engaged in any corruptive practice with other bidders participating in the subject tender
5. THAT what is deponed to herein above is true to the best of my knowledge, information and belief.

.....

..... (Title) (Signature)

(Date)

Bidder's Official Stamp

DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

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

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

Name of Authorized signatory.....

Sign.....

Position.....

Office address..... Telephone.....

E-mail.....

Name of the Firm/Company.....

Date.....

(Company Seal/Rubber Stamp where
applicable) Witness

Name.....

Sign.....

Date.....

D. APPENDIX 1-FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

1. Purpose

- 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

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

of them had a director 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.

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

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

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

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

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

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

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

Beneficiary: _____

Request for Tenders No: _____

Date: _____

TENDER GUARANTEE No.: _____

Guarantor: _____

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

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.
FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

TENDER GUARANTEE No.: _____

1. Whereas [*Name of the tenderer*] (hereinafter called "the tenderer") has submitted its tender dated [*Date of submission of tender*] for the [*Name and/or description of the tender*] (hereinafter called "the Tender") for the execution of ____ under Request for Tenders No. ____ ("the ITT").

2. KNOW ALL PEOPLE by these presents that WE of [**Name of Insurance Company**] having our registered office at (hereinafter called "the Guarantor"), are bound unto [*Name of Procuring Entity*] (hereinafter called "the Procuring Entity") in the sum of (Currency and guarantee amount) for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

Sealed with the Common Seal of the said Guarantor this ____ day of _____ 20 ____.

3. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Applicant:

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

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

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

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

[Date]

[Signature of the Guarantor]

[Witness]

[Seal]

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

FORM OF TENDER-SECURING DECLARATION

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

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

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

To:..... *[Insert complete name of*

Purchaser] I/We, the undersigned, declare that:

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

Signed:.....

..... Capacity / title (director or partner or sole proprietor, etc.)

.....

Name:.....

..... Duly authorized to sign the bid for and on behalf of: *[insert complete*

name of Tenderer] Dated on..... day of.....

[Insert date of signing]

Seal or stamp

Appendix to Tender**Schedule of Currency requirements**

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

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

5. TECHNICAL PROPOSAL

The tender shall complete these sections as a Technical proposal to indicate how he/she intends to proceed with the works. The Procuring entity will review these Proposals and determine the extent to which they meet the required standards to complete the works.

5.1 Site Organization

[Insert Site Organization information]

5.2 Method Statement

[Insert Method Statement]

5.3 Mobilization Schedule

[Insert Mobilization Schedule]

5.4 Construction Schedule

[Insert Construction Schedule]

PART 2 - WORKS' REQUIREMENTS

SECTION V - BILLS OF QUANTITIES

A. Preamble

1. The Bills of Quantities shall be read in conjunction with the Instructions to Tenderers, General and Particular Conditions of Contract, Technical Specifications, and Drawings.
2. The quantities given in the Bills of Quantities are estimated and provisional, and are given to provide a common basis for tendering. 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 tender in the priced Bills of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and prices tendered in the priced Bills of Quantities shall, except in so far as it is otherwise provided under the Contract, include all Constructional Plant, labor, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4. A rate or price shall be entered against each item in the priced Bills 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 Bills of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bills 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.
6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bills of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bills of Quantities.
7. Provisional Sums included and so designated in the Bills of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clause 13.5 and Clause 13.6 of the General Conditions.
8. The method of measurement of completed work for payment shall be in accordance with *Standard Specification for Road and Bridge Construction* of the Ministry of Transport and Communications, 1986.
9. "Authorised" "Directed" or "Approved" shall mean the authority, direction or approval of the Engineer.

10. Unless otherwise stated, all measurements shall be net 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.
11. Units of Measurement and abbreviations used herein shall have the following meanings:

Unit	Abbreviation	Unit	Abbreviation
cubic meter	m ³ <i>or</i> cu m	millimeter	mm
hectare	ha	month	mth
hour	hr	number	No.
kilogram	kg	provisional sum	P.S.
kilometre	km	square meter	m ² <i>or</i> sq m
lump sum	L.S.	square millimeter	mm ² <i>or</i> sq mm
meter	m	vehicle	veh
metric ton (1,000 kg)	t	week	wk
months	mths		

B. Work Items

UPGRADING TO BITUMEN STANDARDS MAU MAU ROAD PROJECT LOT 2B		
SUMMARY OF BILL OF QUANTITIES		
BILL ITEM	DESCRIPTION	AMOUNT (KSHS)
1	Preliminaries and Supervisory/Support Services	
4	Site Clearance and Topsoil Stripping	
5	Earth Works	
7	Excavation and Filling of Structures	
8	Culverts and Drainage Works	
9	Passage to Traffic	
12	Natural Material for the Subbase	
13	Graded Crushed Stone for the Base	
14	Lime/Cement Improved gravel Subbase and Base	
15	Bituminous Surface Treatment and Surface Dressing	
16	Bituminous Mixes	
17	Concrete Works	
20	Road Furniture	
21	Miscellaneous Bridge works	
22	Schedule of Dayworks.	
24	HIV AIDS Awareness and Education	
26	Road Safety and Awareness Campaign	
28	Environmental Mitigation Measures	
(A)	SUB-TOTAL (1)	
(B)	Add 15% VARIATION OF PRICE of sub total (1)	
(C)	Add 10% CONTIGENCIES of sub total (1)	
(D)	SUB-TOTAL (2) = (A + B + C)	
(E)	Add ...16% VAT of sub-total (2)	
TOTAL CARRIED FORWARD TO FORM OF BID		

UPGRADING TO BITUMEN STANDARDS MAU MAU LOT 2B					
BILL NO. 1. PRELIMINARIES AND GENERAL ITEMS					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.01	Provide, furnish, maintain and repair Engineer's Staff houses in accordance with Cl. 132.2 of the specifications and as detailed in drawings. Ownership to revert to the Contractor.				
	(a) Engineer's Senior Staff				
	(i) House Type I	Units	1		
	(i) House Type II	Units	2		
	(b) Engineer's Junior Staff				
	(iii) House Type III	Units	5		
	(iv) House Type IV	Units	10		
1.03	Provide and maintain Engineer's Representative's main office including furnishing the office as per the attached Appendix to Bill no. 1.03 (<i>All furniture to revert to the Contractor at the end of the Contract</i>)	LS	1		
1.04	Provide and maintain Laboratory for the Resident Engineer and his staff for the entire duration of the Contract.	LS	1		
1.05	Provide Laboratory equipment and reagents for use by the Engineer's Representative for the duration of the contract as per the attached Appendix, Bill no 1.05 (<i>All Laboratory equipment to revert to the Employer at the end of the Contract</i>)	LS	1		
1.07	Provide and maintain survey equipment for use by the Engineer's representative for the entire duration of the contract as per the attached Appendix, Bill 1.07 (<i>All Survey equipment to revert to the Employer at the end of the Contract</i>)	LS	1		
1.09	Provide, fuel and maintain with a driver two (2) new 7-seater station wagon vehicle as per cl. 138 of special specifications and approved by Engineer, inclusive of the first 4000 km per vehicle	Veh Month	120		
1.10	EO item 1.09 for total aggregated mileage in excess of 4000 km per vehicle month.	Km	120,000		
1.11	Provide, fuel, and maintain with drivers Four (4) new 4WD double cabin pickups of min. 3000cc engine capacity Turbo charged diesel propelled fully loaded as approved by the Engineer, inclusive of the first 4000km per vehicle month.	Veh Month	192		
1.12	EO item 1.11 for total aggregated mileage in excess of 4000 km per vehicle month.	Km	192,000		

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.13	Provide with drivers, fuel and maintain two (2) no. single cabin pick-up with canvas as per cl.138 of special specifications and approved by the Engineer, inclusive of the first 4000km per vehicle month.	Veh Month	72		
1.14	E.O item 1.13 for total aggregated mileage in excess of 4000 km per vehicle per month.	Km	72,000		
1.15	Allow Prime Cost Sum (P.C.Sum) for the Resident Engineer's Miscellaneous account to be spent in whole or part as directed by the Resident Engineer against receipts	PC Sum	1		
1.16	E.O. item 1.15 for Contractor's overheads and profits.	%			
1.17	Provide, erect and maintain publicity signs as directed by the Engineer.	No	4		
1.18	Allow Prime Cost Sum (P.C. Sum) for removal and alteration of services inclusive of liaison with the appropriate bodies in accordance with Specifications. Such services include: water, power lines, telecommunication cables, railway lines etc.	PC Sum	1	20,000,000.00	20,000,000.00
1.18a	E.O. item 1.18 for Contractor's overheads and profits.	%			
1.19	Allow for payment of the Resident Engineer's support staff for the duration of the Contract as per the Specifications.	PC Sum	1	25,200,000.00	25,200,000.00
1.20	E.O. item 1.17 for Contractor's overheads and profits.	%			
1.25	Allow a Prime Cost Sum (P.C. Sum) for training of KeNHA staff on site for professional registration, attachees, interns and general training	PC Sum	1	10,000,000.00	10,000,000.00
1.26	E.O. item 1.25 for Contractor's overheads and profits.	%			
1.29	Allow a Prime Cost (PC Sum) of Kshs.4,000,000 for Environmental Impact Assessment Study and Licence including hiring of an Environmentalist.	PC Sum	1	4,000,000	4,000,000.00
1.30	E.O. item 1.29 for Contractor's overheads and profits.	%			
1.33	Allow a Prime Cost (PC Sum) for the cost of performing Geotechnical Investigation as required	PC Sum	1	3,000,000	3,000,000.00
1.34	E.O. item 1.33 for Contractor's overheads and profits.	%			
1.37	Allow a Prime Cost (PC Sum) for Quality Control material testing including provision for traing materials Engineers, technicians/Technologists and support staff services by MTRD of the Ministry of Roads and Transport.	PC Sum	1	3,000,000	3,000,000.00
1.38	E.O. item 1.37 for Contractor's overheads and profits.	%			
	Bill No. 1 Total Carried Forward to Grand Summary				

BILL NO. 4: SITE CLEARANCE AND TOP-SOIL STRIPPING

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials and the cost of such shall be included in the rates and prices</i>				
4.01	Clear site on road reserve including removal of trees less than 250mm girth, hedges, bushes and other vegetation or deleterious organic material, grub up roots and backfill to 95% MDD (AASHTO T99) with approved material of holes left by removal of stumps and roots in accordance with clause 401 and 404 of the specifications	Ha.	23.2		
4.02	Removal of unsuitable material/topsoil to a maximum depth of 200mm deep or as directed by the Engineer and in accordance with cl. 402 & 404 of the specifications and as directed by the Engineer	m ³	60,600		
4.03	Allow for removal of any structures and obstructions as directed by the engineer. Payment to be on dayworks basis	Prov. Sum	1		
Bill No. 4 Total Carried Forward to Grand Summary					

BILL NO. 5 : EARTHWORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials and the cost of such shall be included in the rates and prices</i>				
5.01	Fill in soft material including benching of shoulders and embankments and compaction to 95% MDD (AASHTO T99) in layers not exceeding 150mm	m ³	155,000		
5.02	Ditto item 5.01 but in hard material	m ³	15,500		
5.03	Cut to spoil in soft material	m ³	353,750		
5.04	Ditto item 5.03 but in hard material	m ³	35,031		
5.05	Provide improved sub grade material to a thickness as shall be instructed by the Engineer and process, water and compact to 95% MDD (AASHTO T99)	m ³	70,500		
5.06	Compaction of 150mm original ground below fills and cuts to 95% MDD. (AASHTO T99)	m ³	55,800		
5.07	Top soiling prior to planting grass as directed by the Engineer	m ²	124,000		
5.08	Grassing as directed by the Engineer	m ²	124,000		
	Bill No. 5 Total Carried Forward to Grand Summary				

BILL NO. 7: EXCAVATION AND FILLING OF STRUCTURES

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>These work items cover all excavations and filling operations to bridges, box culverts, retaining walls and other major structures.</i>				
7.01	Excavate to spoil in soft materials.	m ³	1,638		
7.02	As item 7.01 but in hard material.	m ³	468		
7.03	Excavate and backfill for gabions in soft material and compact the excavation to receive the gabion boxes and/or spoil the excavated material as directed by the Engineer	m ³	2,400		
7.04	Provide and place macafferri or equivalent 2x1x1 m gabions or mattresses as shown on the drawings or as directed by the Engineer.	m ²	13,200		
7.05	Provide and place rock fill to gabion boxes.	m ³	2,400		
7.06	Provide 1:3 cement mortar grouting to gabion faces as directed by the Engineer.	m ²	120		
7.07	Provide, place and compact rockfill below and around structures.	m ³	442		
7.08	Provide and place 150mm thick stone pitching as directed by the Engineer including cement grouting	m ²	50,000		
7.09	Provide and backfill approved material around new structures, compact 100% MDD (AASHTO T99) in layers not exceeding 150mm.	m ³	312		
7.10	Allow for protection of structures pursuant to Section 708 of the specifications	LS	1		
7.11	River training in soft material	m ³	1,900		
Bill No. 7 Total Carried Forward to Grand Summary					

BILL NO. 8. CULVERTS AND DRAINAGE WORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Note: No separate payments shall be made for gravel for blinding or hauling to spoil unsuitable excavation materials, and the cost of such shall be included in the rates and prices</i>				
8.01	Excavate in soft material for, mitre drains, cut off drains, and outfall drains to free-flowing conditions	m ³	6,000		
8.02	As per item 8.01, but for hard material	m ³	450		
8.03	Excavation in soft material for pipe culverts, headwalls, wingwalls, apron, toewalls, and drop inlets and compact as directed by the Engineer	m ³	4,765		
8.04	As per item 8.03, but for hard material	m ³	315		
8.05	Provide, lay and joint 600mm dia. concrete pipes (precast to BS 5911 Parts 1 & 3) for access roads	m	2,000		
8.06	As for item 8.05 but 900mm dia concrete pipes (precast to BS 5911 parts 1 & 3) for cross culverts	m	600		
8.07	As for item 8.05 but 1200mm dia concrete pipes (precast to BS 5911 parts 1 & 3) for cross culverts	m	144		
8.08	Provide and place class 15/20 concrete to beds, surround and haunches.	m ³	3,128		
8.09	Provide, place and compact class 25(20) concrete for headwalls, wingwalls, aprons, and toewalls to access and cross pipe culverts including all form work and the provision and placing of reinforcement as shown in the drawings	m ³	1,522		
8.10'	Provide and place A 142 fabric mesh reinforcement or equivalent for item 8.09	m ²	6,087		
8.11	Provide and place invert block drains with two course side slabs	m	750		
8.12	Construct in concrete class 15(20) side drains scour checks as instructed	m ³	360		
8.13	Provide subsoil filter drains fabric to isolated wet spots inclusive of artesian cloth, and 14/20mm single size aggregates as directed by Engineer.	m	200		
8.14	Remove existing pipe culverts of any diameter either for re-use or to be discarded as directed by the Engineer	m	400		
	Bill No. 8 Total Carried Forward to Grand Summary				

BILL NO. 9: PASSAGE OF TRAFFIC

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	NOTE: Notwithstanding the provision of Section 9 of the Standard Specification, no extra payments shall be due as all costs shall be deemed to be included in the rates inserted herein				
9.01	Allow for the passage of traffic through and around the works	LS	1		
9.02	Grade, water and compact existing road ahead of works	Km	31		
9.03	Provide, spread, water and compact gravel as directed by the Engineer for maintenance works.	m3	9,000		
9.04	Construct and maintain diversions in maximum lengths of 2 km sections as directed by the Engineer, including including 150mm wearing course gravel all signage, lighting and barriers	Km	10.0		
	Bill No. 9 Total Carried Forward to Grand Summary				

BILL NO. 12 : NATURAL MATERIAL FOR SUBBASE AND BASE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>Note: No overhaul will be paid for separately under these items as it shall be deemed to have been included in the Contractor's rates</i>				
12.01	Provide, transport over any distance, place and compact, natural gravel subbase to carriageway, shoulders, junctions, accesses, parkings, etc; all in accordance with the specifications or as directed by the Engineer	m3	43,943		
	Bill No. 12 Total Carried Forward to Grand Summary				

BILL NO.13: GRADED CRUSHED STONE SUBBASE AND BASE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i>No overhaul will be paid for separately under this item and the cost of hauling will be deemed to have been included in the rates, The rates inserted shall include all items as listed in method –A of measurements in the standard specifications</i>				
13.01	Provide, spread (by paver) water and compact 150mm thick graded crushed stone to base of shoulders and carriageway as directed by the engineer	m3	36,231		
	Bill No. 13 Total Carried Forward to Grand Summary				

BILL NO. 14: CEMENT OR LIME TREATED SUBBASE AND BASE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<i><u>Note:</u> No overhaul will be paid for separately under these items as it shall be deemed to have been included in the Contractor's rates</i>				
14.01	Provide and spread Lime as an improvement agent for sub-base	Tonne	1,977		
14.02	Provide and spread Cement as an improvement agent for base	Tonne	1,304		
14.03	Mix and process natural material with improvement agent for pavement layers as instructed by the Engineer or as specified	m ³	80,174		
14.04	Curing of cement / lime treated base and sub-base layers	m ²	582,800		
	Bill No. 14 Total Carried Forward to Grand Summary				

BILL NO. 15: BITUMINOUS SURFACE TREATMENT & SURFACE DRESSING TO SHOULDERS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
15.01	Provide and spray Mc 30 prime coat to carriageways, shoulders and junctions at a rate of 1.0-1.2l/m ²) or as directed by the engineer.	Litres	308,760		
15.02	Provide, heat and spray 80/100 Pen bitumen as binder for single seal on carriageway and double seal on shoulders; all in accordance with the specifications and as directed by the Engineer. (Approx. spray rate range of blend 0.8- 1.2 litres/m ²)	Litres	297,600		
15.03	Provide, lay and roll 10/14 mm size precoated chippings at a rate of 80-120m ² /m ³ to carriageway, shoulders and junctions or as directed by the engineer.	m ³	3,410		
15.04	Provide & spray K1-60 as tack coat on carriageway, shoulders and junctions or as directed by the engineer. Rate of 0.5-0.8 l/m ²	litre	208,320		
Bill No. 15 Total Carried Forward to Grand Summary					

BILL NO. 16: BITUMINOUS MIXES

BILL NO. 20: ROAD FURNITURE					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
20.01	Provide Road Reserve Boundary posts	No.	248		
20.02	Excavate for, provide & place 250 x 125mm precast concrete raised or ramped kerbs haunched in 100mm thick class 15/20 concrete base bedding and mortar joined in support to carriageway, busbays and junctions as directed by the Engineer.				
	a) Straight kerbs	m	900		
	b) Kerbs radius 12m - 6m	m	100		
	c) Ditto but radius 5m - 1m	m	80		
20.03	As 20.02 but for flush kerbs 100 x 125mm	m	1,000		
20.04	Provide and erect permanent road signs where instructed by the Resident Engineer and in accordance with Special Specifications Clause 2004 as follows:				
	a) warning signs	No.	80		
	b) Priority prohibitory and mandatory signs	No.	40		
	c) Standard informatory signs	No.	20		
	d) Non-standard informatory signs area				
	i) Less than 1.0m ²	No.	10		
	ii) More than 1.0m ² but less than 5m ²	No.	10		
20.05	Provide, deliver, paint, and mark the road as specified or as directed by the Engineer, with white reflectionized thermoplastic paint from an approved supplier.	m ²	6,200		
20.06	As item 20.05 but for yellow reflectionized thermoplastic paint	m ²	3,100		
20.07	Provide and erect concrete posts for guardrails complete with spacers (size and interval) as per specifications or as directed by the Engineer	No.	525		
20.08	Provide and erect flex-beam guardrails complete with connections as shown on the drawings or as directed by the Engineer	m	1,400		
20.09	Provide Edge marker posts	No.	120		
20.10	Provide kilometer marker posts as directed by the Engineer	No.	64		
	Bill No. 20 Total Carried Forward to Grand Summary				

BILL NO. 21: MISCELLANEOUS BRIDGE WORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
21.01	Provide and place as directed by the Engineer PVC pipes of diameter 75mm to form weep holes as instructed by the Engineer.	No	0		
21.02	Provide and fix in position handrails 75 mm diameter on crash barriers, with hold down brackets at not more than 2.5 meters intervals.	m	80		
21.03	Providing and placing bitumen emulsion or cutback bitumen or bitumen/rubber latex emulsion to all structural concrete in contact with fill material or cut soil.	m ²	0		
21.04	Provide and place into position elastomeric laminated rubber bearings (fixed or free) of thickness 30mm - 80mm as directed by the Engineer.	No.	0		
21.05	Provide and install movement joint and sealant for bridges	m	0		
21.06	Provide and install bituminous felt bearings as shown in the drawings.	No.	0		
21.07	Provide and place into position galvanised flexi-beam guardrails including end pieces,nuts and bolts along the approaches to the bridges as per drawings and as instructed by the Engineer	m	40		
21.08	Provide and place a 0.5m wide drainage layer of class 14/20 mm to structural concrete in contact with fill material.	m ³	0		
21.09	Provide and place as directed by the Engineer PVC pipes of diameter 75 mm and length 300 mm to form storm drain pipes of the bridge deck	No.	0		
	Bill No. 21 Total Carried Forward to Grand Summary				

BILL NO. 22: SCHEDULE OF DAYWORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>PLANT</u>				
	<i>The rates inserted herein are to include all operational and Maintenance costs, fuel, oil, grease, drivers/operators' wages, supervision, overheads and profit. Only time actually employed upon the work will be paid for and the rates should include for idle time, travelling time and overtime, In accordance with clause 2202 (a) of the specifications. Note: All items of plant must be priced.</i>				
22.01	Crawler dozers with hydraulic attachments to include ripper				
	a) Up to 135 kw rated flywheel power	hrs	20		
	b) Over 136 kw rated flywheel power	hrs	20		
22.02	Motor Grader				
	a) Up to 110kw rated flywheel power	hrs	20		
	b) Over 100kw rated flywheel power	hrs	20		
22.03	Vibratory Roller				
	a) 6.5 - 8.81 tonne un-ballasted weight	hr	20		
	b) Over 8.91 tonne un-ballasted weight	hr	20		
22.04	Hand propelled vibrating roller 650 - 1300kg	hrs	20		
22.05	Cat 950G wheel loader or equivalent	hrs	20		
22.06	10 Tonne tipper lorry	hrs	20		
22.07	Small dumpers, 750-1000kg rated payload	hrs	20		
22.08	Dual purpose hydraulic excavator with backhoe/loader and a rated bucket capacity of upto 1m3.	hrs	20		
22.09	Articulated wheel loader with 1.5-2.0m ³ SAE rated bucket capacity	hrs	20		
22.10	50mm delivery water pump and motor	hrs	20		
22.11	Self-propelled water tanker 4,500ls min. capacity with pick-up pump	hrs	20		
22.12	Concrete Mixer of 100 - 150litres	hrs	20		
22.13	Concrete poker vibrator	hrs	20		
	<u>LABOUR</u>				

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	TOTAL BROUGHT FORWARD				
	<u>MATERIALS</u>				
	<i>All materials are to comply with the Specification. The rates inserted herein are to include for delivery to the site, storage, handling, overheads, and profit</i>				
22.18	Ordinary Portland Cement	Ton	2		
22.19	Hydrated Lime	Ton	2		
22.20	Mild Steel (any diameter)	Ton	2		
22.21	High Yield Steel (any diameter)	Ton	2		
22.22	Fine Aggregate for Concrete	m ³	20		
22.23	Coarse Aggregate for Concrete	m ³	20		
22.24	Wrot Shuttering Timber	m ²	20		
22.25	Rough shuttering timber.	m ²	40		
22.26	Bitumen Emulsion KI-60.	Litre	200		
22.27	Straight run bitumen Grade 80/100.	Litre	200		
22.28	Kerosene	Litre	200		
22.29	14/20 mm nominal size surface chips.	m ³	40		
22.30	6/10mm nominal size surface chips	m ³	40		
22.31	AC Type II Ex-plant	m ³	20		
	Bill No. 22 Total Carried Forward to Grand Summary				

BILL NO. 24: HIV AIDS AWARENESS AND EDUCATION

[illegible]

BILL NO. 26: ROAD SAFETY AWARENESS CAMPAIGN[illegible]

BILL NO. 28: ENVIRONMENTAL MITIGATION MEASURES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
28.01	Allow P.C Sum for the implementation of the Environmental and Social Management Plan (ESMP) during construction	P.C. Sum	1.00	8,000,000.00	8,000,000.00
28.02	Extra over item 28.0 I for Contractor's profit and overheads	%			
Bill No. 28 Total Carried Forward to Grand Summary					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

APPENDIX TO BILL ITEM 1.03: PROVIDE, FURNISH AND MAINTAIN THE R.E.'S OFFICE					
ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
A103/1.01	Construct and maintain the RE'S office for the entire contract period, rate includes the building, security, water, electricity, gas, cleaning, tea, coffee etc in accordance with the specifications. Measurement and payments to be done in accordance with clause 141(b) of the standard Specs.	Item	1.00		
A103/1.02	3 Drawer steel filing cabinet	No	3.00		
A103/1.03	Executive desk 2.2 x 0.9 m with six lockup drawers	No	2.00		
A103/1.04	Desk 2.2 x 0.9 m with chair and six lockup drawers	No	3.00		
A103/1.05	Standard office desk with three lockup drawers	No	3.00		
A103/1.06	Standard office desk with three drawers	No	9.00		
A103/1.07	Executive Swivel orthopeadic chair adiustable heizht	No	2.00		
A103/1.08	Standard office chairs	No	19.00		
A103/1.09	Bench 3 m long with cushioned backrest (located as directed)	No	1.00		
A103/1.10	Typist's desk	No	1.00		
A103/1.11	Typist's chair	No	3.00		
A103/1.12	Lockable steel stationery cupboard, 1.2 m ³ , lockable	No	4.00		
A103/1.13	Medium size steel filing cabinet, 4 drawers lockable	No	4.00		
A103/1.14	Medium size steel filing cabinet, 2 lockable drawers lockable	No	3.00		
A103/1.15	Bookshelf, 1.5 m wide 3 shelves (for box files) sliding glass door	No	4.00		
A103/1.16	Conference table with 12 chairs	No	1.00		
A103/1.17	Table 0.8 m ² surface area for making tea	No	1.00		
A103/1.18	Safe for cash and valuables min.size approx. 0.8 x 0.5 x 0.4 m to be concreted in place (wall/floor mounted) complete with lock and keys	No	2.00		
A103/1.19	Curtains for office and laboratory - for all windows and doors	Set	2.00		
A103/1.20	Ceiling fans	No	8.00		
A103/1.21	Air conditioner unit, 12000 BTU/hr	No	1.00		
A103/1.22	Pendant I Battery powered wall clock	No	10.00		
A103/1.23	Dust bins	No	6.00		
A103/1.24	Filing Tray	No	10.00		
A103/1.25	Refrigerator minimum capacity 0.2 m ³	No	1.00		
A103/1.26	Cupboard, 0.15 m ³ , lockable	No	1.00		
A103/1.27	Cooker 4 plate electric cooker with oven and grill	No	1.00		
A103/2.01	Intel pentium i7 laptop computer	No.	5.00		
A103/2.02	Intel pentium i5 laptop computer	No.	3.00		
A103/2.03	Digital camera (Equal or greater than 15.2 megapixels)	No.	1.00		
A103/2.04	Provision, installation, testing and maintaining of a Local Area Network (LAN) with high speed internet for the RE's office for the entire duration of the	Lsum	1.00		

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
A103/2.05	A4 Laser Printer	No.	2.00		
AI03/2.06	A3 Deskjet Printer	No.	1.00		
A103/2.07	Stapling machine Ofrex size 50 or similar with 5000 staples	No.	4.00		
A103/2.08	Ordinary 2-hole paper punch	No.	12.00		
AI03/2.09	Heavv duty 2-hole paper punch	No.	2.00		
Total Carried Forward to Next Page					

APPENDIX TO BILL ITEM 1.05: PROVIDE AND MAINTAIN FURNITURE AND EQUIPMENT FOR THE ENGINEER'S LABORATORY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	1. FURNITURE				
A105/1.01	Meeting table (3.0 x 1.2 m) with 6 chairs	No.	1.00		
A105/1.02	Ceiling fans	No.	4.00		
A105/1.03	Air conditioner unit, 12000 BTU/hr	No.	2.00		
A105/1.04	Desk 2.2 x 0.9 m with 2 chest of drawers	No.	2.00		
A105/1.05	Office chairs, standard	No	6.00		
A105/1.06	Chairs with arms	No.	8.00		
A105/1.07	Table (1.5 x .75 m) with 2 drawers and 2 chairs	No.	1.00		
A105/1.08	4-drawer Steel lockable filing cabinet	No.	2.00		
A105/1.09	Electronic scientific calculator, 12 figures	No.	4.00		
A105/1.10	Fire extinguisher, 10 litre capacity, CO2 type	No.	2.00		
A105/1.11	Steel filing cabinet, 4 drawers, lockable	No	1.00		
A105/1.12	Steel filing cabinet, 2 drawers, lockable	No	1.00		
A105/1.13	Book shelf, 3 shelves 1.2 m long (to hold box files)	No.	2.00		
A105/1.14	First aid kit	No.	1.00		
A105/1.15	Snake bite kit	No.	1.00		
A105/1.16	Water filters	No.	2.00		
Total Carried Forward to Next Page					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	Brought Forward From Previous Page				
	2. EQUIPMENT				
	i. General Equipment				
A105/1.17	Compaction mould complete with base plate and extension collar. 101.6 mm dia x 116.43 mm high	No.	4.00		
A105/1.18	2.5 kg Compaction rammer, drop regulated to 304.8 mm	No.	4.00		
A105/1.19	4.535 kg compaction rammer, drop regulated to 457.2 mm	No.	4.00		
A105/1.20	Straight edge 300 mm long, with handles	No.	6.00		
A105/1.21	Electric vibrating Kango Hammer fitted with steel tamper (BS 1377) with support frame	No.	1.00		
A105/1.22	Steel Tamper (BS 1377) compatible with Kango hammer	No.	4.00		
A105/1.23	Compaction mould complete with base plate and extension collar, 152.4 mm dia x 16.43 mm high	No.	4.00		
A105/1.24	Galvanized sample tray I x 0.5 x 75 mm deep	No.	6.00		
A105/1.25	75 mm brush	No.	10.00		
A105/1.26	Semi-automatic Electronic balance, 25 kg capacity accurate to 10g, including weights	No.	1.00		
A105/1.27	20 mm BS sieve, 300 mm diameter	No.	2.00		
A105/1.28	Stop Clock	No.	2.00		
A105/1.29	Thermostatically controlled electric oven I 04 - 110 °C, capacity 0.225 m'	No.	2.00		
A105/1.30	As above but gas heated	No.	1.00		
A105/1.31	Moisture tin, 90 mm dia x 20 mm deep, cadmium plated or aluminium alloy	No.	100.00		
A105/1.32	Cone penetrometer with gauge and automatically controlled test cup	No.	1.00		
A105/1.33	Test gauge	No.	1.00		
A105/1.34	Penetration test cup	No.	2.00		
A105/1.35	Penetration test cone	No.	3.00		
A105/1.36	Glass comparator	No.	2.00		
A105/1.37	Glass plate	No.	2.00		
A105/1.38	Evaporating Dish 150mm dia x 45mm depth	No.	4.00		
	ii. Density (Sand replacement method BS 1377)				
A105/1.39	Metal container (450 mm dia.)	No.	4.00		
A105/1.40	Stainless steel tray, 305 mm dia x 50 mm deep	No.	4.00		
A105/1.41	Metal tray with 150 mm dia hole in centre, 300 x 300mm square or equivalent area, 400 mm deep	No.	3.00		
A105/1.42	Metal tray with 200mm dia hole in centre, 500 x 500mm square 50 mm deep	No.	3.00		
A105/1.43	Steel pegs for fixing tray in position	No.	20.00		
A105/1.44	Sand pouring cylinder, 150 mm dia	No.	5.00		
A105/1.45	Sand pouring cylinder, 215 mm dia	No.	5.00		
A105/1.46	Cold steel chisel 20 x 300 mm long	No.	6.00		
A105/1.47	Cold steel chisel 10 x 250 mm long	No.	6.00		
A105/1.48	1.5 kg (2 off), 3.5 kg (2 off) mason hammers and 1 kg (2 off) rubber mallet	Set	3.00		
Total Carried Forward to Next Page					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	Brought Forward From Previous Page				
A105/1.49	Scoop for removing excavated material from hole, 250 mm long handle	No.	10.00		
A105/1.50	100 mm brush, soft	No.	4.00		
A105/1.51	50 mm brush, soft	No.	6.00		
A105/1.52	Primus gas stove	No.	3.00		
A105/1.53	Calibration can 150 mm dia x 150 mm deep	No.	4.00		
A105/1.54	Ditto item 54/106 but 200 mm dia x 250 mm deep	No.	4.00		
	iii. Density (Nuclear Density method AASHTO T238)				
A105/1.55	Nuclear density gauge (Troxler 341 I B or similar approved) complete with hole forming device (3 off) and guide (3 off)	No.	1.00		
	iv. CBR (AASHTO T193)				
A105/1.56	50 kN CBR Load frame complete with stabilising bar (electric and hand operated) including proving rings for 10 KN, 28 KN and 50 KN, piston and bracket	No.	1.00		
A105/1.57	CBR penetration piston including bracket	No.	2.00		
A105/1.58	Penetration gauge range 0 - 25 mm travel x 0.01 mm divisions	No.	2.00		
A105/1.59	CBR mould, 152.4 mm dia. x 178 mm high, complete with perforated base plate and extension collar 50.8 mm high that can be fitted to either end of the mould	No.	50.00		
A105/1.60	Perforated swell plate 150 mm dia. With an adjustable centre post of rustproof metal provided with a lock nut	No.	50.00		
A105/1.61	Swell tripod	No.	50.00		
A105/1.62	Swell dial gauge	No.	50.00		
A105/1.63	2.27 kg slotted surcharge weight	No.	15.00		
A105/1.64	2.27 kg annular surcharge weight	No.	30.00		
A105/1.65	2.8 kg solid base plate for CBR mould	No.	4.00		
A105/1.66	Central extruder, complete with 29 KN hydraulic jack and accessories.	No.	1.00		
A105/1.67	Spacer disc with "T" handle	No.	4.00		
A105/1.68	Soaking tank for CSR mould sufficient to hold at least 100 moulds	No.	2.00		
	v. Specific Gravity for Aggregates (BS 812)				
A105/1.69	200 mm dia. Wire mesh basket with apertures not greater than 6.5 mm large enough to contain 2.5 kg of aggregates	No.	1.00		
A105/1.70	A stout watertight container in which the basket can be freely suspended	No.	1.00		

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
A105/1.71	Soft absorbent cloth (tea towel)	No.	20.00		
A105/1.72	Shallow tray of area not less than 0.065 m ²	No.	4.00		
A105/1.73	An airtight container of similar capacity to the basket	No.	2.00		
A105/1.74	Pycnometer of 1 litre capacity	No.	4.00		
A105/1.75	Electronic automatic 5 kg balance accurate to 0.1 g to be of size and type to permit the basket containing the sample to be suspended in water (to be supplied with weights)	No.	1.00		
A105/1.76	Well ventilated oven, thennostatically controlled to maintain a temperature of 105°C +-5°C	No.	1.00		
	vi. Sieve Analysis (BS 1377)				
A105/1.77	Sieve 300 mm dia:75,63,50,37.5,28, 25,19,20,14,12.5,10,9.5,6.3,5,4.75 and 4 mm, plus lid and reciever	Set	3.00		
A105/1.78	Sieve 200 mm dia: 2.36.,2,1.18,1,0.6,0.5,0.425,0.300,0.150 and 0.075mm plus lid and reciever	Set	3.00		
A105/1.79	Electric Sieve shaker	No.	1.00		
A105/1.80	1.2 x 1.2 m x 50 mm deep galvanized metal tray	No.	15.00		
A105/1.81	Riffle box with 50 mm slots	No.	2.00		
	vii. Concrete: Slump and Cube Manufacture (BS 1881)				
A105/1.82	Slump cone, tamping rod and base	Set	3.00		
A105/1.83	Steel rule	No.	2.00		
Total Carried Forward to Next Page					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	Brought Forward From Previous Page				
A105/1.84	Concrete cube mould 150 mm cube {plastic mould)	No.	20.00		
A105/1.85	Large curing tank (capacity 50 No. Cubes)	No.	1.00		
A105/1.86	Cube tamping rod and spanner for item No. Cubes)	No.	3.00		
	viii. Concrete: Cube Compression Testing				
A105/1.87	Concrete compression machine, to BS 1610 Grade A with 300 mm gauge, rectangular platens, capacity 1560 kN with load pacer together with 100 kN flexural frame with accessories, complete with a set of safety guard, 20, 50, 80 and 100 mm distance nieces and electro- mechanical pacer	No.	1.00		
	ix. Aggregate and Chippings				
A105/1.88	Sand equivalent equipment to AASHTO T1 76 including a graduated plastic measuring cylinder, rubber stopper, irrigator tube weighed foot assembly, siphon assembly, 85ml (57 mm dia), wide mouth funnel (I 00 mm dia.), stop clock, mechanical shaker and 101 working calcium chloride solution	Set	1.00		
A105/1.89	Los Angeles Abrasion machine including 2 spare sets of abrasive charges	Set	1.00		
A105/1.90	Standard aggregate crushing value apparatus, supplied complete with cylinder, plunger, base plate, tamping rod and measure.	Set	3.00		
A105/1.91	Aggregate Impact testing machine to determine the aggregate impact value{AIV)	No.	1.00		
A105/1.92	Sodium sulphate test apparatus	No.	10.00		
A105/1.93	Beaker 250ml	No.	2.00		
A105/1.94	Reagent grade silica gel, 500 g container	No.	100.00		
A105/1.95	Tamping rod 8 mm dia. x 300 mm long and metal measure 115 mm dia. x 180 mm deep for above (BS 812)	No.	1.00		
Total Carried Forward to Next Page					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
A105/1.96	Flakiness gauge (BS 812) passing 10.0 mm retain 6.3 mm	No.	1.00		
A105/1.97	Flakiness gauge (BS 812) passing 14.0 mm retain 10.0 mm	No.	1.00		
A105/1.98	Flakiness gauge (BS 812) passing 20.0 mm retain 14.0 mm	No.	1.00		
A105/1.99	Flakiness gauge (BS 812) passing 28.0 mm retain 20.0 mm	No.	1.00		
A105/1.100	Flakiness gauge (BS 812) passing 37.5 mm retain 28.0 mm	No.	1.00		
A105/1.101	Flakiness gauge (BS 812) passing 50.0 mm retain 37.5 mm	No.	1.00		
A105/1.102	Flakiness gauge (BS 812) passing 63.0 mm retain 50.0 mm	No.	1.00		
	x. Tray Spray and Spread Rate Test				
A105/1.103	Transverse distribution test of bitumen spray (depot tray test to BS 1707) equipment	No.	1.00		
A105/1.104	Rate of spread of coated chippings Tray and chains	No.	4.00		
A105/1.105	Calibrated spring balance	No.	4.00		
A105/1.106	Steel tray 306 x 306 x 38 mm (for measuring bitumen spray)	No.	10.00		
A105/1.107	Gunny sacks	No.	400.00		
A105/1.108	Plastic bag 900 x 450 mm x 1 000 gauge	No.	2,000.00		
A105/1.109	Plastic bag 450 x 300 mm x 1000 gauge	No.	2,000.00		
A105/1.110	Filter paper 150 mm dia. Whatman No. 5 (Boxes of 100)	No.	40.00		
A105/1.111	Filter paper 450 mm dia. Whatman No. 5 (Boxes of 100)	No.	20.00		
A105/1.112	Filter paper 100 mm dia. Whatman No. 5 (Boxes of 100)	No.	20.00		
A105/1.113	Cotton Waste (or drying cloth)	KG	20.00		
A105/1.114	Filter paper 400 mm dia. Whatman No. 54 (Boxes of 100)	No.	10.00		
	xi. Miscellaneous				
A105/1.115	Gas cylinders 13 kg	No.	5.00		
A105/1.116	Padlocks	No.	6.00		
A105/1.117	Plastic jerry 201 capacity	No.	6.00		
A105/1.118	Paper punch	No.	2.00		
A105/1.119	Stapler with pins	Pkts	20.00		
A105/1.120	Tray lifting callipers	No.	4.00		
A105/1.121	Laboratory dust coats-Brown	No.	16.00		
A105/1.122	Laboratory dust coats-White	No.	6.00		
Total Carried Forward to Next Page					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	Brought Forward From Previous Page				
A105/1.123	Asbestos gloves	No.	16.00		
A105/1.124	Laboratory gumboots (assorted sizes)	No.	16.00		
A105/1.125	Wheel barrow	No.	4.00		
A105/1.126	Dust pan plus brush	No.	4.00		
A105/1.127	Hand shovel	No.	6.00		
A105/1.128	Pick axe with handle	No.	6.00		
A105/1.129	Metal scoop, large (120 x 190 x70mm) cast aluminium handle	No.	4.00		
A105/1.130	Metal scoop, large (70 x 110 x40mm) cast aluminium handle	No.	6.00		
A105/1.131	Garden trowel	No.	4.00		
A105/1.132	Sample tray 306 x 306 x 38 mm	No.	20.00		
A105/1.133	Spatula 200 mm blade	No.	6.00		
A105/1.134	Spatula 100 mm blade	No.	6.00		
A105/1.135	BS sieve 450 mm dia, 37.5 mm	No.	1.00		
A105/1.136	BS sieve 450 mm dia, 20 mm	No.	1.00		
A105/1.137	BS sieve 450 mm dia, 5 mm	No.	1.00		
A105/1.138	BS sieve 450 mm dia, 0.425 mm	No.	2.00		
A105/1.139	BS sieve 450 mm dia, 0.3 mm	No.	2.00		
A105/1.140	BS sieve 450 mm dia, 0.75 mm	No.	2.00		
A105/1.141	Set of lid and receiver for item 212 to item 217	No.	1.00		
A105/1.142	BS sieve brush double ended brass and nylon bristle	No.	4.00		
A105/1.143	Measuring cylinders plastic with sprout 100ml, 250ml, 500ml, capacity	set	3.00		
A105/1.144	Glass jar capacity 5litre with lid	No.	10.00		
A105/1.145	200mmx200mmx20mm cadmium plated or aluminium tin	No.	50.00		
A105/1.146	Electronic Automatic balance, capacity 1000 g accurate to 0.01 g	No.	1.00		
A105/1.147	Electronic Automatic balance, capacity 2100 g accurate to 0.1 g	No.	1.00		
A105/1.148	Electronic Automatic balance, capacity 50 kg accurate to 10 g	No.	1.00		
A105/1.149	Dial -0-gram balance 310 g capacity accuracy to 0.1 g	No.	1.00		
A105/1.150	Field and laboratory scale with scoop 10,000g capacity accurate to 1.0g	No.	1.00		
A105/1.151	Distilled water still	No.	1.00		
A105/1.152	Polythene or vessels with tap at bottom	No.	2.00		
A105/1.153	Set of stiff broom and soft broom with handles	No.	5.00		
A105/1.154	Vernier callipers, 150 mm, accurate to 0.1 mm	No.	1.00		
A105/1.155	As above but 200 mm, accurate to 0.002 mm	No.	1.00		
A105/1.156	Pestle and mortar	No.	2.00		
A105/1.157	Linear shrinkage mould (BS 1377)	No.	25.00		
A105/1.158	Average least dimension gauge	No.	2.00		

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	Brought Forward From Previous Page				
	xii) Standard Specification (Copies of each of the latest editions of the following Standards)				
A105/1.174	KS 1725	No.	1.00		
A105/1.175	BS 812, Testing aggregates	No.	1.00		
A105/1.176	BS 882: 1992, Specification for aggregates from natural sources for concrete (AMD 13579) (No longer current but cited in Building Regulations)	No.	1.00		
A105/1.177	BS 1377: 1990, Methods of testing soils for Civil engineering purposes	No.	1.00		
A105/1.178	BS 1881: Methods of testing concrete	No.	1.00		
A105/1.179	BS 434-2:2006, Bitumen road emulsions. Code of practice for use of cationic bitumen emulsions on roads and other paved areas	No.	1.00		
A105/1.180	BS 1924, Stabilised materials for civil engineering purposes	No.	1.00		
A105/1.181	BS EN 1008:2002, Mixing water for concrete	No.	1.00		
A105/1.182	BS 4449:2005, Steel for the reinforcement of concrete - Weldable reinforcing steel - Bar, coil and decoiled product - Specification (+A2:2009)	No.	1.00		
A105/1.183	BS 8666:2005, Scheduling, dimensioning, bending and cutting of steel reinforcement for concrete - Specification (incorporating Amendment No. 1)	No.	1.00		
A105/1.184	BS 4483:2005, Steel fabric for the reinforcement of concrete - specification (AMD 17105)	No.	1.00		
A105/1.185	BS EN J 96:2005, Methods of testing cement	No.	1.00		
A105/1.186	BS 5911-200:1994: Precast concrete pipes and ancillary concrete products. Unreinforced and reinforced manholes and soakaways of circular cross section (AMD 11031) (AMD 13205) (No longer current but cited in Building Regulations)	No.	1.00		
A105/1.187	BS 8004: Code of practice for foundations	No.	1.00		
A105/1.188	Overseas Road Note 3, (ORN 3), A guide to surface dressing in tropical and sub-tropical countries	No.	1.00		
A105/1.189	AASHTO Part I: Specifications	No.	1.00		
A105/1.190	AASHTO Part II: Tests	No.	1.00		
A105/1.191	Asphalt Institute Standards: MS- 2, Mix design methods for asphalt concrete and other hot- mix types	No.	1.00		
	xiii) Marshal Test (ASTM D1559)				
A105/1.192	Petrol driven 100 mm dia core cutter with all accessories	No.	1.00		
A105/1.193	Specimen mould+ base plate+ extension collar	No.	10.00		

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
A105/1.194	Specimen extractor	No.	2.00		
A105/1.195	Compaction hammer	No.	2.00		
A105/1.196	Compaction pedestal + specimen mould holder	No.	2.00		
A105/1.197	Breaking head mould	No.	1.00		
A105/1.198	Electrical 30 kN Marshall compression testing machine	No.	1.00		
A105/1.199	Suitable electrically operated laboratory mixer, 101 capacity	No.	1.00		
A105/1.200	Proving ring 28 kN capacity graduated in 0.0025 mm	No.	1.00		
A105/1.201	Flowmeter	No.	2.00		
A105/1.202	Suitable mechanical mixer	No.	1.00		
A105/1.203	Water bath at least 150 mm deep thermostatically controlled to maintain water at $60^{\circ}\text{C} \pm 1^{\circ}\text{C}$ with a perforated false bottom or equipped with a shelf to support specimen 50mm above the bottom of the bath, with cover	No.	1.00		
A105/1.204	Thermometer (50°C to 25°C) 50 mm dia with 180 mm stainless steel stem	No.	2.00		
A105/1.205	Bench mounted 51 capacity with isomantle electric heater	No.	2.00		
	xiv) Bitumen Extraction test				
	<i>(a) Cold extraction Bollie Roller Method, BS 598: 102</i>				
A105/1.206	Electronic top pan balance 4 kg capacity	No.	1.00		
A105/1.207	Flat bottomed scoop	No.	3.00		
A105/1.208	Steel garden trowel	No.	2.00		
A105/1.209	Large steel spoon	No.	2.00		
Total Carried Forward to Next Page					

CONSTRUCTION OF MAU MAU ROAD PROJECT LOT 2B: MURANG'A COUNTY

ITEM	DESCRIPTION	UNIT	Quantity	Rate (Kshs)	Total Amount (Kshs.)
	Brought Forward From Previous Page				
A105/1.210	Heat resistant gloves	pair	10.00		
A105/1.211	Foot pump for pressurising air water assemblies up to a maximum of 700KN/m ² and fitted with flexible hose approximately 1.2m long and connector	No.	2.00		
A105/1.212	Steel bottle 600ml capacity with 50mm rubber stopper	No.	2.00		
A105/1.213	Steel bottle 2500ml capacity with 70mm rubber stopper	No.	2.00		
A105/1.214	Steel bottle 7000ml capacity with 70mm rubber stopper	No.	2.00		
A105/1.215	Flask funnel for fitting to the 700ml steel bottle with rim of funnel retaining sieve 200mm nominal diameter	No.	1.00		
A105/1.216	Bottle roller compact bench mounted unit designed to rotate 2 bottles simultaneously about longitudinal axis	No.	1.00		
A105/1.217	Pressure filter complete with cutting tool for making hole in the filter paper	No.	1.00		
A105/1.218	Filter funnel to take 200mm nominal diameter sieves	No.	2.00		
A105/1.219	Continuous flow centrifuge	No.	1.00		
A105/1.220	Binder recovery apparatus	No.	1.00		
A105/1.221	Volumetric flask 250ml, 500ml, 100ml and 2000ml capacity each	No.	2.00		
A105/1.222	Recovery still for Dichloromethane	No.	1.00		
	<i>(b) Hot Extraction Method, BS 598</i>				
A105/1.223	Hot extractor complete with steel pot with gasket and gauze container, dean and stark receiver, Liebig condenser and a box of filter paper-Whatman No.5 x 400 mm dia or equivalent	No.	2.00		
	<i>Compactors</i>				
A105/1.224	Gyratory compactor by gyrocomp manufactured by controls or equivalent with 1 No 100mm and 1 No 150 mm dia mould - BS EN 12697-31	No.	1.00		
A105/1.225	Percentage Refusal Density (PRO) Vibrating hammer compactor complete with shanks, tampers (small and large), 6 split moulds, 7 base plates from ELE or equivalent - BS EN 12697-32	No.	1.00		
	xv) Consumables				
A105/1.226	Paraffin wax	kg	50.00		
A105/1.227	Gas	kg	1,800.00		
A105/1.228	Filter paper 270 mm dia., 33 mm with dia. Hole in centre, Whatman No 5 (Box of JOO)	No.	15.00		
A105/1.229	Trichloroethylene	kg	2,000.00		
A105/1.230	Dichloromethane	kg	1,000.00		
Total carried to Bill No.1, item 1.05					

APPENDIX TO BILL ITEM 1.07: PROVIDE AND MAINTAIN SURVEY EQUIPMENT

[illegible]

SECTION 6A - STANDARD SPECIFICATIONS

The Standard Specifications referred to in this document is the *Standard Specifications for Road and Bridge Construction, 1986 Edition* published by the Ministry of Transport and Communications. This document shall form part of the Contract.

SECTION 6B ~ SPECIAL SPECIFICATIONS

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SECTION 1 – GENERAL**100 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 shall take precedence

101 LOCATION OF THE PROJECT

The project road is approximately 31 km long and is situated in Murang'a County whose main economic activities are subsistence farming and large-scale tea and coffee production. Development of the roads will promote social welfare, economic activities as well as agricultural production. The total length of the project will be approximately 31Km and will be funded under the Government of Kenya Development Levy Fund.

101 SCOPE OF WORKS

The scope of works consists of

- I. Upgrading to bitumen standards of JCT C538 (D421) Mitarakwa - JCT C336 Ha Paulo -Mbari ya Hiti - JCT B23 Gatuya, Mbari Ya Hiti-Gitige Road – 15 Km
- II. Upgrading to bitumen standards of JCT C536 Githambo – Nduruini – Matharite – JCT E2144 Githiga, JCT C536 Kahatia – Nduruini E2144 Road – 16Km

The works to be executed under the contract consist of, but are not limited to, the following:

- a. Facilitation of the Supervision staff,
- b. Site Clearance and Topsoil removal,
- c. Earthworks to formation level,
- d. Provision of 150mm Cement Improved gravel subbase,
- e. Provision of 125mm Cement Improved Graded Crushed Stone base,
- f. Provision, processing and compaction of a 50mm thick layer of Superpave asphalt concrete (AC) as wearing course for the carriageway 6m, shoulders 1m both sides, bus bays, accesses and junctions,
- g. Laying single seal with 10/14mm chippings on carriageway 6m, shoulders 1m both sides, bus bays, accesses and junctions,
- h. Application of penetration grade 80/100 bitumen and single seal surface dressing using pre-coated 10/14mm chippings surface dressing on the carriageway, shoulders, accesses and junctions,
- i. Drainage and protection works shall be as follows:
 - Removal of existing inadequate and defective cross and access culverts, inlets and outlet structures and replace as instructed by the Engineer.
 - Construction of pipe culverts, headwalls, wingwalls and aprons to cross and access culverts inclusive of concrete surround.
 - Construction of side and mitre drains and outfall channels to the whole road including improvement of other drainage and soil erosion protection works.
 - Carryout protection works (scour checks, stone pitching) as instructed by the Engineer.
 - Carryout any miscellaneous works that is not included above but may be deemed necessary by the Engineer for the execution and completion of the works.
- j. Road Furniture,
 - Provision and erection of all road signs and markings as instructed by the Engineer.

- Provide, lay and joint raised kerbs, precast concrete channels and invert block drains as instructed by the Engineer.
 - Plant selected grass on slopes of embankment and cuttings.
 - Provide and fix flex beam guardrail at high fill areas and at the approaches to the Road Bridge and a handrail on the bridge deck.
- k. Concrete Works,
- Construction of standard box culverts, wing walls, piers and abutments for the bridges.
- l. Other Ancillary Works,
- Improvement of junctions and accesses as instructed by the Engineer.
 - Protection of existing utility services and way leaves acquisition.
 - Landscaping and planting of selected trees, flowering bushes and grass on slopes of embankment and cuttings.
 - Protection works using stone pitching and gabions as necessary.
- m. Regular maintenance of the existing road for passage of traffic during construction including diversion works as necessary to meet regulatory requirements.
- n. Any other operation ancillary to the main works.

The Works detailed above are only indicative of the Scope of Works associated with this contract and the Engineer may, where necessary, substitute some of the Works with others within the project area without substantially altering the overall Scope of the Works. Work shall be measured and paid using the relevant rates and prices in the Bill of Quantities.

The works will also include for any operations necessary for the safe and convenient passage of through and local traffic at all times.

102

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.

Documents

The following manuals that are important and relevant to the contract, will not be issued with the tender documents but will be available for inspection during normal working

hours at the offices of the Director (Highway Planning and Design), Kenya National Highways Authority, P.O. Box 49712 - 0100, Nairobi, Kenya.

Road Design Manual:

Part 1: Geometric Design of Rural Roads

Part 3: Materials and Pavement Design for New Roads

Manual for Traffic Signs:

Part 1: Road Markings

Part 2: Traffic Signs

104

PROGRAMME OF EXECUTION OF THE WORKS

The contractor shall provide the works programme, required under clause 14 of the Conditions of Contract, within 14 days of receipt of the Engineer's Order to commence work

The programme shall be coordinated with climatic and other conditions to provide for the completion of the works in the order and by the time specified.

The Contractor shall carry out the contract 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, of his obligation to complete the works in the prescribed order and by the prescribed completion date and he shall from time to time review his progress and make such amendments to his rate of execution of the works as may be necessary to fulfil his obligations.

The Contractor shall allow in his programme for construction of trial sections and carrying out tests upon them as directed by the Engineer in accordance with the provisions of Clause 129 of the Standard Specification. The time for completion of the Contract shall not be extended because of the time taken to carry out tests and evaluate trial sections.

105

ORDER OF EXECUTION OF WORKS

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

107

TAKING OVER CERTIFICATE

The minimum length of the road for which a certificate will be issued is the entire length of a road segment of the project road when substantially completed.

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.

Explosive and Blasting

(a) 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.

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

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

111 NATIONAL SPECIFICATIONS

Add the following at the end of this clause

“The Contractor shall provide all such specifications not more than 60 days after commencement of contract and at least 14 days before the execution of work to which the specification is applicable.”

117 HEALTH, SAFETY AND ACCIDENTS

Add 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.

121 DIVERSION OF SERVICES

- (a) 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 BID rates.
- (b) Subject to the agreement with the Engineer, the Contractor shall be responsible for removal of alteration and relocation of existing services.
- (c) The Contractor shall indemnify the Employer against claims originating from damage to existing services or works.

123 LIAISON 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 there from. 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 competent surveyors 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.

127 INFORMATION FROM EXPLORATORY BORINGS AND TEST PITTS

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 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 plants 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

The Contractor shall provide and erect **two (2)** publicity signboards on each of the road links as directed by the Engineer. The Engineer shall, as shown in the Drawings, direct the minimum dimensions of the boards. The signs shall be printed reflective Vinyl Stickers on galvanised steel plates min 350mm high. Posts shall be galvanised steel. Main headings lettering shall be Yellow and min 80mm high, while subheadings lettering shall be White and min 60mm high as per the drawings.

132 HOUSING ACCOMMODATION FOR THE RESIDENT ENGINEER AND HIS STAFF, OFFICE AND LABORATORY INCLUDING FURNITURE

132.1 HOUSING ACCOMMODATION FOR ENGINEER'S STAFF

The Contractor shall provide and maintain furnished houses as indicated in the drawing or as approved by the Engineer.

132.2 LIST OF FURNITURE FOR ENGINEER'S STAFF HOUSES

Each house shall be provided with new furniture, equipment and fittings to the approval of the Engineer as listed below respectively:

All the houses and furniture mentioned above shall revert to the Contractor after the completion of the contract.

Item Description	Quantity per House Type				
	Type I	Type II	Type III	Type IV	Type V
Double Bed (5x6) with "Slumberland" Mattress	3	3	2	0	0
Single Bed (3 ½ x 6) with "Slumberland" Mattress	0	0	0	1	1
Dressing table with mirror and stool	0	0	0	0	0
Chest of 5 No. drawers with mirror	3	2	1	0	0
Wardrobe (movable)	3	2	2	1	1
Resident table	3	2	1	1	0
Bedroom chair	2	1	0	0	0
600mm x 450mm high medicine cabinet with mirror	2	1	1	1	1
Bathroom stool	0	0	0	0	0
Towel Rail	2	1	1	1	1
Dining Table (2m x 1m approx.)	1	1	1	1	1
Dining Chairs	6	4	4	0	0
Side Board	2	1	1	0	0
3-piece lounge chairs	2	1	1	1	1
Armchair with cushions	2	2	2	0	0
Coffee table 40 x 45cm high	2	1	1	1	1
Occasional tables, 70x70x45 cm high	1	1	1	0	0
Book case (2m long with 3 shelves)	1	1	1	1	1
Writing Desk with chair	1	1	1	1	1
Kitchen shelves (per sq. m)	1	1	1	1	1
Kitchen table (2m x 0.8m approx.)	3	2	2	1	1
Kitchen chair	3	3	3	1	1
Refrigerator (at least 19 cu.ft.) including a freeze compartment of about 3 cu.ft. capacity	1	0	0	0	0
Refrigerator (at least 7 cu.ft) including a freezer compartment	0	1	1	1	1
Cold water storage tank of at least 400 L capacity	1	1	1	1	1
Water filter at least 15 L capacity	1	1	1	1	1
Table lamps	3	2	2	1	0
Electric fan	1	1	1	1	1
Gas or Electric hot water unit for kitchen	1	1	1	1	1
Gas or Electric hot water unit for bathroom	1	1	1	1	1
Electric & Gas cooker with 4 burners, a grill and an oven	0	0	0	0	0
Electric cooker 2 elements	1	1	1	1	1
Primus stove	1	1	1	1	1
Solar lamp	2	2	2	1	1
Dustbin	1	1	1	1	1
Waste paper basket	3	1	2	2	2
Fire extinguisher at least 9L capacity	1	1	1	1	1
2m x 1.5m high curtain with lining	8	8	4	2	0
1m x 1.5m high curtain with lining	12	12	6	3	1

Payments shall be made under the relevant provisions in the Bills of Quantities. No separate payment shall be made for provision and maintaining of the above furniture for the RE's houses. This will be deemed to have been included in the rate for provision of the same under the appropriate bill items.

132.3

ENGINEER'S MAIN OFFICE

The contractor shall provide a furnished and equipped main office of plan area not smaller than 155 metre square that is equivalent of the MoPW Standard Resident Engineer's Office. This office shall be of weatherproof construction, provided with mosquito proof and burglar-proof windows and lockable doors and suitably insulated against heat and cold, fitted with air conditioning units, all to the satisfaction of the Engineer. The windows shall be fitted with curtains and blinders.

The offices shall be provided with water and electricity supply and waterborne sewage disposal, and the Contractor shall allow for any water and electricity consumed and for

any statutory charges associated with provision of the utilities. The Contractor shall also provide 24 hours a day security and security lights, the cost of which shall be deemed to have been included in the rates for the offices.

The offices shall also be provided with a back-up power supply, the cost of which shall be deemed to have been included in the rates for the offices. The Contractor shall, on provision of receipts, be reimbursed for expenses for the provision of consumables for the back-up power supply under miscellaneous receipted accounts.

The office for the Resident Engineer shall be completely separate from that of the Contractor.

Measurement and payment for the Engineers office shall be made under the relevant provisions in the Bills of Quantities. The rate inserted for provision of the main office shall include the cost of complying with the requirements of clauses 117, 124, 125, 132, 133, 134, 135, 136 and 137 of the standard specifications. The office building shall revert to the Contractor at the end of the project.

LIST OF FURNITURE FOR ENGINEER'S OFFICE

The list of furniture for Engineer's office is as per Appendix 1.03 of the Bill of Quantities.

All furniture bought under the Contract shall revert to the Contractor at the end of the Contract.

Measurement and payment for the Engineers office furniture shall be made under the relevant provisions in the Bills of Quantities. No separate payment shall be made for maintaining of the above furniture and this will be deemed to have been included in the rate for provision of the same under the appropriate bill items.

The Contractor, when instructed, shall provide and install at the Engineer's office the Equipment specified below with a dealer's certificate and warranty:

a) Photocopying Machine 1No.

Digital copier with the following minimum specifications:

Color: Colour
Copy Speed A4: 41 - 50 PPM
Print Speed A3: 20 PPM, A4 - 40PPM
Resolution: 600 x 600 dpi
2 x 500 sheet paper cassettes Standard
200 sheets Multipurpose Bypass Standard
Copier Memory 1024MB Standard Min - (Max 2GB) + 80 GB Standard
Printer Memory 1024MB Standard Min (Max 2GB) + 80 GB Shared with copier
25%- 400% Zoom
Paper size A6 - A3
Recommended monthly volume 6000 copies
Type: Free Standing

(b) Personal Computer (PC) - 2 No.

The rate inserted for the PCs shall include for the provision of the UPS, a Printer and the software specified below for each PC.

- Processor Intel Core i7 - 2600 (3.4GHZ, 8MB cache, 4 Cores)
 - RAM 8GB - DDR SDRAM
 - Hard Disk SATA, 1 TB, and Min 7200 RPM
 - Display 17" TFT Colour SVGA with NVidia or Radeon graphics accelerator with min 1GB video RAM
 - Motherboard FSB speed: 1GHz
 - Expansion slots 4 No.
 - Ports 6 USB ports (minimum)
-

- Operating system Windows 10
- Fully multimedia 4 speed CD ROM 52X (minimum) with sound card and two external speakers 10W minimum.
- Network Network Ready, Wi-Fi
- Blu-Ray Drive Not anything less than DVD superdrive
- Warranty 2 years

(c) Laptop – 8 No.

The rate inserted for the Laptop shall include for the provision of a Printer and the software specified below for each laptop.

- Processor Intel Core i7 or higher
- RAM DDR SDRAM 1GHz speed, 8GB (minimum)
- Disk Cache 1024 MB (minimum)
- Hard Drive 1 TB 5400 rpm SATA
- Video Graphics NVIDIA GeForce 940M (2GB DDR3L dedicated)
- Keyboard Full-size island-style backlit with numeric keypad
- Expansion slots 1 multi format-SD media card reader, 1 HDMI,
- 1 headphone/microphone combo, 1 RJ45
- Ports 4 USB ports 3.0 (1 USB Boost)
- Operating system Windows 10
- Pointing Device Imagepad with multi-touch gesture support
- Network card Integrated 10/100/1000 Gigabit Ethernet LAN
- Wireless Connectivity – 802.11a/b/g/n/ac and Bluetooth 4.0 combo
- Sound Bang & Olufsen with 4 speakers and 1 subwoofer
- Optical Drive SuperMulti DVD burner
- Warranty 2 years
- Battery life: min 6 hours
- Built-in webcam min 2MP

(d) Laser Jet Printer Specifications

1. Speed 20ppm
2. Memory 32MB expandable to 80MB
3. Resolution 1200Xx1200dpi
4. Compatibility MS Windows 95/98/2000/XP/Vista
5. Power input 220-240V
6. Paper size A6 – A4 (A3 for 1No. printer)

1 No. Laptop shall be supplied with a printer capable of printing in A3 paper size. While the rest PCs and laptops to be supplied with A4 LaserJet printers of model Hp2050 or better approved.

(e) UPS specifications

1. Rating 650 VAC (minimum)
 2. Input Voltage 220-240V (minimum)
 3. Output 220-240V (minimum)
 4. Output frequency 50-60HZ
 5. Battery module minimum 60 minutes' backup time on 50% rated
 - a. Sealed Lead-acid
 - b. Short recharge time (max. 5 hours for 100%)
 6. Protection Output overload
Input output short-circuit
-

(f) Software

1. Microsoft Office (Latest Version) Professional with licence
2. Autodesk Civil3D (Latest Version)
3. Antivirus: McAfee Virus Scan Professional (Latest Version)
4. Adobe Acrobat Pro (Latest Version)

Prior to purchase of the computers, laptops and printers, the contractor shall submit the specifications of the same to the Engineer for approval. The contractor shall be paid for these items under appropriate bill items in the BoQ. The Personal Computers, Laptops, Printers, UPSs and Photocopying Machine shall revert to the Employer at the end of the Contract.

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 appropriate bill items in the BoQ.

The Contractor shall provide and maintain for the duration of the contract internet services for the Engineer's offices and laboratory. All charges and fees related to the provision, installation and maintenance of internet services shall be deemed to have been included in the rates for providing and maintaining the office and laboratory. Charges related to the operation of the internet shall be reimbursed to the Contractor on provision of receipts for the same.

132.4

ENGINEER'S SURVEY EQUIPMENT

The Contractor shall provide and maintain for the duration of the contract the Engineer's survey equipment as required by the Engineer. The Contractor, when instructed, shall provide and install at the Engineer's office the Equipment specified below with a dealer's certificate and warranty:

- Engineer's automatic level WildNAK2 and tripod or similar ~ 4 No.
 - Set of tripods (Wild or similar) ~ 4 No.
 - Survey umbrella ~ 4 No.
 - Levelling staff 5m with leveling bubble (wild iNLe 3 or similar) ~ 10 No.
 - 2.5m ranging rod (metallic) ~ 2 No.
 - 1m stainless steel straight edge ~ 2 No.
 - 3m aluminum straight edge ~ 2 No.
 - 30m steel white face tape ~ 6 No.
 - 100m steel band tape ~ 2 No.
 - 3m tape measure ~ 6 No.
 - Steel tape repair outfit ~ 1 No.
 - 2kg hammer ~ 4 No.
 - Pangas 16" straight ~ 10 No.
 - Total Station complete with a field data collector TOPCON Model iTS-722 or similar including all accessories and supporting software ~ 1 No.
 - Sets of fully divided scale rules ~ 6 No.
 - Real Time Kinematic (RTK) GPS survey equipment with accessories ~ 1 No.
 - Hand held GPS equipment ~ 2 No.
 - Radio calls/Walkie Talkies – 3 pairs
 - Rise and fall leveling books ~ 50 No.
-

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 provide or maintain the equipment 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.

132.5

ENGINEER'S LABORATORY AND EQUIPMENT

The Contractor shall provide and maintain for the duration of the contract the Engineer's laboratory as shown in the Book of Drawings and provide all the laboratory equipment and reagents as required by the Engineer. The Contractor shall be paid under appropriate bill items in the Bills of Quantities or on provision of receipts as required by the Engineer.

The laboratory shall be sited adjacent to the Resident Engineer's main office and shall revert to the contractor at the end of the contract.

The laboratory shall have piped potable water supply and a continuous electricity supply adequate for lighting, heating and operating the laboratory equipment.

The laboratory shall have a height from floor to ceiling of not less than 2.75 metres and all rooms shall be fitted with electric lighting and power points as instructed by the Engineer's Representative, and each door shall be fitted with a good quality mortise lock and provide with two keys.

Soaking tanks for CBR specimens shall be provided at floor level in the laboratory. Concrete cube curing tanks of adequate size shall also be provided. Both the CBR tanks and concrete cube curing shall have drainage pipes built-in.

The following rooms and facilities shall be provided in the Laboratory: -

a) Office

This room shall have a total floor area of not less than 14 square metres and a total window area of not less than 2 square meters. The door and windows shall be fitted with fly screens covered with mosquito gauze. The floor shall be of concrete with a float finish. The walls shall be lined and ceiling provided.

A display board of soft board or similar approved material, with a minimum surface area of 3 square metres shall be provided and securely fixed to the wall.

b) Main Laboratory

This room shall have a total area of not less than 55 square meters and a total window area of not less than 7 square metres. The external entrance shall be a double door and single doors shall be provided for access to the adjacent offices. The external door and all windows shall be fitted with fly screens covered with mosquito gauze.

The floor shall be of concrete and float finished. The room shall be fitted out as indicated by the Engineer's Representative with three rigidly constructed work benches each minimum 2 metres long by 1-metre-wide by 1 metre high and with top comprising either metal lined hard wood or steel float finished concrete at least 75mm thick and suitably reinforced, with a sink minimum size 600mm long by 450mm wide by 300mm deep fitted with a tap and waste pipe. Wall shelves, 450mm in width and having a surface area of at least 6 square metres, shall be provided and securely fitted.

Two display boards of soft board or similar approved material, each with minimum area of 3 square metres, shall be securely affixed to the walls as directed by the Engineer's Representative.

c) Small Laboratory Room

This room shall have a total floor area of not less than 20 square metres and a total window area of not less than 2 square metres. The windows shall be fitted with fly screens covered with mosquito gauze. A single door shall provide access to the main laboratory room. The floor shall be fitted out as indicated by the Engineer's Representative with two rigidly constructed work benches each of minimum dimensions 2 metres long by 1-metre-wide by 1 metre high with a top comprising either metal lined hardwood or a steel float concrete finish of at least 75mm thickness and suitably reinforced, with a sink of minimum size 600mm long by 450mm wide by 300mm deep fitted with a tap and waste pipe and concreted to the water supply for the main laboratory room. An approved air extractor fan shall be fitted through an outside wall.

d) Store Rooms

These rooms having a total floor area of not less than 20 square metres shall be provided adjacent to the main laboratory building in a position to be indicated by the Engineer's Representative.

e) Concrete Slab for Sample Drying

A reinforced concrete slab 100mm thick and of total area not less than 20 square metres shall be provided adjacent to the main laboratory building in a position to be indicated by the Engineer's Representative. The slab shall have a smooth finish to the satisfaction of the Engineer.

The contractor may be directed to pay for stationery, equipment or reagents that are foresaid and also pay for servicing and repair of the laboratory equipment being used on the project.

The equipment shall be of approved manufacture, and shall be ready to use and complete to perform the tests. The equipment shall revert to the Employer on completion of the Contract

Any delays to the Contractor or the Contractor's activities caused by the Engineer being unable to perform field or laboratory tests due to the contractor's failure to supply and/or maintain the said equipment shall be deemed to have been caused entirely by the Contractors 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 at completion of the Works.

132.6

MOBILE PHONES FOR ENGINEER'S STAFF AND OFFICE

The Contractor shall, if so instructed by the Engineer provide, connect and maintain mobile phones for the exclusive use by the Engineer and his staff for the duration of the contract. The Contractor shall provide air-time for these mobile phones as directed by the Engineer and be reimbursed under appropriate items in the Bills of Quantities.

133

TIME FOR ERECTION OF THE ENGINEER'S OFFICE AND LABORATORY

All houses, offices and laboratories to be provided under the Contract shall be handed over to the Engineer in finished and fully habitable condition not later than sixty days after the Engineer's order to commence work (Clause 41 of the Conditions of Contract).

No construction of the Works will be permitted until the Engineer's offices and laboratories have been accepted by the Engineer as finished and able to function efficiently.

Allowance has been in the Bills of Quantities for provision of alternative arrangements for houses, offices and laboratories acceptable to the Engineer for his staff within the above sixty day period. These arrangements may include the use of hotels, rented accommodation, hire of caravans, etc. In the case where the houses, offices and laboratories are not completed after sixty days, the Contractor will thereafter be

responsible for all costs of such temporary arrangements, including that of additional transport.

All equipment shall be made available to the Engineer, for his exclusive use throughout the Contract, not later than three (3) weeks after the Engineer's order to supply.

135 MAINTENANCE OF THE ENGINEER'S STAFF HOUSES, OFFICES LABORATORIES, FURNITURE AND EQUIPMENT

Add at the end of the Clause:

The Contractor shall maintain all buildings, access, services, facilities, furniture and equipment provided by him and/or the Employer until the issue of the Taking-over Certificate for the whole of the Works, and if required for a period thereafter until the Contractor has completed any outstanding work.

The Contractor shall maintain all furniture and equipment provided by him in a useable state and shall replace promptly any item that becomes unserviceable or is lost.

The Contractor shall provide cleaners, grounds men, and day and night watchmen for housing camp and offices as directed or instructed by the Engineer on site, the cost of which shall be included in the rates for providing houses, offices and laboratory.

Additional armed security shall also be provided as instructed by the Engineer and payment done under the appropriate item in the Bill of Quantities.

137 ATTENDANCE UPON THE ENGINEER AND HIS STAFF

The Contractor shall pay wages (including all overtime) and house all attendant staff to fulfill the requirements of Clause 137 of the Standard Specification.

The list of junior support staff required by the Engineer is indicated below: -

- Administrator - 1 No.
- Clerk/Secretary - 1 No.
- Lab Attendant - 6 No.
- Leveller - 2 No.
- Chainman - 6 No.

The Contractor will be paid on a prime cost basis plus a percentage for overheads and profits under appropriate items in the Bills of Quantities. The payment referred to in this clause shall exclude the cost of maintaining the offices in compliance with clause 137, paragraphs 1, 2 and 4 of the standard specifications which are deemed to be included in the rates for providing the Office.

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 Engineer and his staff throughout the contract, brand new vehicles, as described in the Bill of Quantities.

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 including recognized days of rest.

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 per veh.month), shall be by vehicle months.

Payment for mileage above 4,000Km per vehicle month, 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 may be instructed by the Engineer to make payments of general miscellaneous accounts for such items as stationary, stores and equipment and miscellaneous supervision personnel and claims or the Engineer may direct the Contractor to purchase or pay for the above. The Contractor will be paid on a prime cost basis plus a percentage for overheads and profits under appropriate items in the Bills of Quantities.

140

PAYMENT OF OVERTIME FOR ENGINEER'S JUNIOR STAFF

In the last line delete the words "shall be at the Contractor's expense" and substitute with "including the approved percentage for administrative overheads shall be paid by the Contractor to the Engineer".

If the Contractor wishes to execute permanent works outside the Engineer's normal working hours as stated in Clause 45.1 of the Conditions of Contract, then the payment for overtime for the Engineer's junior staff shall be reimbursed in full by the Contractor to the Engineer plus a 20 percent additional amount to cover for the Engineer's administrative overheads.

If the Contractor wishes to execute the works on regular basis outside the Engineer's normal working hours, over a prolonged period, the Engineer may, if he deems it necessary, employ additional supervisory staff for which the required salaries, plus twenty (20%) percent additional amount to cover for the Engineer's administrative overheads shall be reimbursed in full by the Contractor to the Engineer. In addition, the Contractor shall provide the required accommodation for such staff at his own cost. The Contractor shall not be reimbursed any of these costs.

141

MEASUREMENT AND PAYMENT

Delete Sub-Clause 141 (a) entirely and substitute with: -

- a) No Preliminary item has been included in this Contract. All Contractor's mobilisation and general costs shall therefore be included in relevant rates in the Bill of Quantities.

Delete Sub-Clause 141 (m) entirely.

142

ENVIRONMENTAL PROTECTION

Further to the requirements of Clause 19.1 of the Conditions of Contract, the Contractor shall be responsible for the following measures to protect the environment:

- 1) Compliance with national and local statutes and regulations relating to protection of the environment. The Contractor will be responsible for familiarizing himself with all existing national and local legislation in this regard.
 - 2) All construction activities shall be carried out using the best possible means to reduce environmental pollution such as noise, dust and smoke. All vehicles and plant shall be regularly serviced in accordance with the manufacturer's recommendations to ensure that they operate efficiently and without excessive noxious emissions. The Engineer will have the authority to instruct the Contractor to temporarily cease operations and/or remove from the site vehicles or plant which
-

do not comply with this requirement, until such time that he is satisfied that best practicable means to reduce environmental pollution to a minimum are being used.

- 3) The Contractor shall at all times maintain all sites under his control in a clean and tidy condition and shall provide appropriate and adequate facilities for the temporary storage of all waste prior to proper approved disposal.
- 4) The Contractor shall be responsible for the safe transportation and disposal of all waste generated as a result of his activities in such a manner as will not give rise to environmental pollution in any form, or hazard to human or animal health. In the event of any third party being employed to dispose of waste, the Contractor shall be considered to have discharged his responsibilities under this clause from the time at which waste leaves sites under his control, providing that he has satisfied himself that the proposed transportation and disposal arrangements are such as will not give rise to pollution or health hazard.
- 5) The Contractor shall be responsible for the provision of adequate sanitary facilities for his workforce, and that of his sub-contractors, at all construction and ancillary sites. The Contractor shall not allow the discharge of any untreated sanitary waste to groundwater or any surface watercourse.

Prior to the mobilization of the workforce the Contractor shall provide details of proposed sanitary arrangements to the Engineer for approval, such as will allow him to assess whether or not the proposed facilities are adequate and are unlikely to pollute water resources, and also that the facilities will be properly operated and maintained.

- 6) All concrete and asphalt plants shall be operated and maintained in accordance with the original manufacturer's specifications and manuals, and in such a manner as to minimize emissions of hydrocarbons and particulates. If, in the opinion of the Engineer, the operation of such plant is causing, or is likely to cause nuisance or health problems to site staff or the general public, the Contractor shall carry out such work as is necessary to reduce emissions to an acceptable level within a time-scale agreed with the Engineer.
- 7) The Contractor shall regularly douse with water all exposed dirt surfaces to reduce dust levels.
- 8) The Contractor shall take all reasonable measures, at all sites under his control, to prevent spillage and leakage of materials likely to cause pollution of water resources. Such measures shall include, but not be limited to the provision of bunds around fuel, oil and bitumen storage facilities, and provision of oil and grease traps for servicing and fuelling areas.

Prior to construction of such facilities, the Contractor shall submit details of pollution prevention measures to the Engineer for his approval.

- 9) The Contractor shall be responsible for ensuring that exposed surfaces are re-vegetated as construction progresses, all to the satisfaction of the Engineer.
- 10) The removal of trees shall be kept to the minimum necessary to accommodate the Permanent Works.

Prior to the removal of any trees the Contractor shall inform the Engineer of the intended operation and obtain the permission of the Engineer for the removal of the trees. If any tree is removed without permission the Contractor shall replant another approved tree at no additional cost to the Employer.

- 11) The Contractor shall ensure that fires, except for controlled fires for burning rubbish, do not start within the Site or in the environs thereto as a result of the works or from the actions of his employees. The burning of waste, such as vehicle tyres causing noxious emissions is prohibited. The Contractor shall have available at all times trained fire-fighting personnel provided with adequate fire-fighting
-

equipment to deal with all fires. The Contractor shall additionally at all times provide sufficient fire protection and fighting equipment local to parts of the Works which constitute particular fire hazards.

- 12) The contractor shall as instructed by the Engineer carry out off – road mitigation measures to the approval and satisfaction of the Engineer and to the required standards. The contractor shall obtain Environmental mitigation licence for the same and also comply with Environmental Management Coordination Act (EMCA) 1999, and Environmental Impact Assessment (EIA) and Environmental Audit (EA) Regulations 2003.

No separate payment shall be made in respect of this Clause 142 and the Contractor shall be deemed to have allowed in his general rates and prices for the cost of complying with the requirements of this Clauses.

144 COPIES OF ORDERS AND REQUISITIONS

The Contractor shall provide the Engineer with copies of all orders for supply of materials and goods required in connection with the works as the Engineer may require.

145 SHORTAGE OF BITUMEN AND OTHER MATERIALS

The Contractor shall make provisions for obtaining bitumen and other materials required for the Contract if they are not available locally. In particular, the Employer shall not be liable for any additional costs due to local lack of bitumen or any other materials.

SECTION 2 - MATERIALS AND TESTING OF MATERIALS

All materials testing shall be in accordance with Section 2 of the Standard Specifications.

205 SOILS AND GRAVEL

Whenever in the Contract Document a minimum California Bearing Ratio (CBR) is specified, the CBR of the material shall be determined at the specified state 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

211 BITUMINOUS 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 5% by weight

b) Types of Bitumen

Prime coat shall be type MC30 unless otherwise stated. Tack coat shall be K1-70 emulsion. For surface dressing the binder shall be 80/100 pen grade bitumen cut back or straight run while binder for asphalt concrete shall be 60/70 pen grade bitumen

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/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

SECTION 3 - SETTING OUT AND TOLERANCES**301 SETTING OUT****a) Setting Out**

In addition to the provisions of clause 3.01(a) 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 will have to 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. 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 road reserve boundary posts shall have 12mm diameter steel pins embedded in concrete, 200mm long with 25mm exposed to the air, sticking out from its top surface. This pin shall be co-ordinated and heighted and result of the same shall be provided to the Engineer for approval. Cost of these works shall be included in the rates as no separate item has been provided.

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 Kms of the road.

b) Detailed Setting Out

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

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

302 TOLERANCES

Add the following:

(e) Pavement Widths

For Pavement widths for subbase, base and wearing course, the allowable tolerances shall be 0 to +50 mm.

(f) Pipe Culverts

The maximum deviation from the specified line of a drainage pipe shall be: -

Horizontal	~	25mm in 3.0 m
Vertical	~	30 mm in 10.0 m

SECTION 4 - SITE CLEARANCE AND TOP SOIL STRIPPING

401 SITE CLEARANCE

Site Clearance shall be carried out as directed by the Engineer.

Add the following as the last paragraph in Sub-clause (a):

Site clearance is not required over the gravelled width of existing road and shoulders. No measurement and payment for site clearance will be made for this width. The remaining area within the road reserve including sides of existing embankments and cuttings shall be cleared as instructed by the Engineer. This operation shall also include the removal of all trees, except for some trees as directed by the Engineer. The Contractor shall provide paint and all the assistance the Engineer may require to mark the trees which **should not** be removed during site clearance.

The Contractor shall take care not to uproot or damage trees which are within the road reserve but outside the construction width. After the Contractor has staked out the extent of the road, the Engineer, with the assistance of the Contractor, shall mark out the trees to be removed. After removal, the trunks and branches of these trees shall be cut up into pieces not more than 2.0m in length, transported and neatly stored at the nearest Ministry of Roads camp or otherwise in a position to be indicated by the Engineer. No additional payment shall be made for complying with this requirements and it is deemed the Contractor will have included its cost in the rates for site clearance.

402 REMOVAL OF TOPSOIL

Topsoil shall include up to 200mm depth of any unsuitable material encountered in existing or newly constructed drains, drainage channels, and accesses.

403 REMOVAL OF STRUCTURES, FENCES AND OBSTRUCTIONS

When instructed by the Engineer, the Contractor shall demolish or remove any structure within the right of way of the road. Measurement for the works shall be done on dayworks basis and payments made under the appropriate item in the Bills of Quantities.

SECTION 5 – EARTHWORKS

501 SCOPE OF SECTION

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

504 PREPARATION PRIOR TO FORMING EMBANKMENT

In cuttings, the contractor shall excavate to a level that would accommodate the 300mm 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 new cross section, the rate for compaction of resultant 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. This shall be confirmed through proof-rolling.

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

505 CONSTRUCTION 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 shoulders 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

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

- CBR of not less than 14% measured after 4day soak on a laboratory mix compacted to a dry density of 100% (AASHTO T 99)
- Plasticity Index less than 30%
- Swell less than 1% on the laboratory mix sample.
- Placed in layers not exceeding 150mm thick

Subgrade shall mean the upper 450mm 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

508 COMPACTION OF EARTHWORKS

At pipe culverts, all fill above ground level around the culverts shall be compacted to density of 97% 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 14% 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.

509 MASS-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".

511 BORROW PITS

The first part of the Standard Specification is amended as follows: -

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 but to the approval of the Engineer contrary to what has been stated.

515

SIDE DRAINS

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

517

MEASUREMENT 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 (97% 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

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

601

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

SECTION 7 - EXCAVATION AND FILLING FOR STRUCTURES

703 EXCAVATION 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"

707 BACKFILLING 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.

709 EXCAVATIONS FOR RIVER TRAINING AND NEW WATER COURSES

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.

710 STONE 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 square in shape with minimum dimensions of 200x200 mm 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.

711 GABIONS

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 KeNHA's Regional Director's offices.

712 RIP-RAP PROTECTION WORK

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).

714 BACKFILL 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 97% MDD (AASHTO T180).

SECTION 8 - CULVERTS AND DRAINAGE WORKS

All concrete works for culverts and other drainage structures shall be done in accordance with Section 17 of the specifications

801 SCOPE OF SECTION

Add 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.

804 EXCAVATION FOR CULVERTS AND DRAINAGE WORKS

Add as follows:

- (a) In paragraph 6, line 3, and in paragraph 7, line 5 and in paragraph 11, line 6, "95% MDD (AASHTO T99)" and insert "97% 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.

805 EXCAVATION IN HARD MATERIAL

In the Standard Specifications, Sub-clauses 805(a) and 805 (b) delete "'95% MDD (AASHTO T99)" and insert "97% MDD (AASHTO T180)".

In sub-clause 809(a), paragraph 1, line 1, substitute "95% MDD (AASHTO T99)" with "97% MDD (AASHTO T180)".

In sub-clause 809(c), paragraph 2, line 4, between the words "compacted" and "and shaped" insert the words "to 97% 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.

BEDDING 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 97% 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 A193 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 with 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 volume of concrete 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.

JOINTING CONCRETE PIPES

Add 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.

CONCRETE 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.

812 BACKFILLING

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 97% 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 not 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:

	Mass g/m ²	Wide Strip Tensile Strength kN/m ²	Mullen Burst Strength kPa
Under and For Drainage Material Behind bridges, Box culverts,	180	Mean 12/12	2160
Under Gabions, Gabion Mattresses or Grouted Rip –Rap	250	Mean 18/18	3040
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 Specifications.

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.

817 MITRE 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

Add Sub-Clause 823(r): -

Item : Concrete for balloon cast pipes/culverts cast in-situ

Unit : m³

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.

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.

Add Sub-Clause 823(s): -

Item : Invert Block Drain

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.

Add Sub-Clause 823(t): -

Item : Geotextile

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

SECTION 9 - PASSAGE OF TRAFFIC

900 TRAFFIC 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 Kshs. 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.

902 IMPROVEMENTS TO EXISTING ROAD

Where instructed by the Engineer, the Contractor shall carry out improvements to any existing roads adjacent to or affected by the Works in accordance with Clause 903 of the Standard Specification except for items (c) and (i) of the clause.

903 MAINTENANCE OF EXISTING ROAD

The Employer shall hand-over the existing roads 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 in accordance with Clause 903 of the Standard Specification.

Where instructed by the Engineer, the Contractor shall lay on the existing road at or ahead of the works a gravel wearing course of suitable approved material with the properties detailed in 904(c) below.

Where the existing road is paved, the contractor shall maintain it by repairing the potholes and edge breaks using 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.

904 CONSTRUCTION OF DEVIATIONS

a) General

In addition to requirement of this clause, the maximum length of deviation road shall be restricted to 4 Kms 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 4 Km 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 4 Km till he has completed first 4 Km 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 20% at "97% 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.

906 PASSAGE 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.

907 SIGNS, 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".

909 ASSISTANCE 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.

912 MEASUREMENT AND PAYMENT

(a) Improvement of the Existing Road

The cost of complying with the requirements of Clause 902 of this Specification is deemed to be included in the rate for maintenance of passage of traffic.

(b) Maintenance of the Existing Road

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

(c) Construction of Deviation

The Contractor will be paid by the kilometre to the nearest 0.1 km along the centreline of the deviation subject to the following: -

(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 installments over the contract period, as he satisfactorily maintains the deviation (as per clauses 904 and 905) 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 installments 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) Passage of Traffic Through the Works

Payment shall be made on Lump Sum basis in accordance with Clause 912(d) of the Standard Specification.

(e) Provision of Signs and Barriers

The Contractor will be paid by in accordance with Clause 912(c) the Standard Specification.

(f) Assistance to Public

The Contractor will be deemed to have included the cost of all other items in this section elsewhere in his rates and prices, and no separate payment shall be made.

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SECTION 11 – SHOULDERS

1101 GENERAL

Shoulders whose construction approach is detailed in the drawings shall be constructed to a width of 2.0m in accordance with sections 5, 12, 15 and 16 of the specifications as appropriate.

SECTION 12 ~ NATURAL MATERIAL SUBBASE AND BASE

1203 MATERIAL REQUIREMENTS

Natural materials for base and subbase shall conform to the specifications given in Section 12 of the Standard Specifications for cement or lime improved base and subbase.

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

SECTION 13 – GRADED CRUSH STONE SUBBASE AND BASE

1303 MATERIAL REQUIREMENTS

The material for Graded Crushed Stones base shall comply with requirements for stone class B 0/40 for Base. After compaction and compliance with the requirements of clause [40] of this specification below, the subbase/base graded crushed stone material shall have a maximum of 8% of particles smaller than 0.75mm and the resultant layer shall comply with all the requirements of section 13 of the standard specification. The crushing ratio for all graded stone pavement material shall be minimum of 100%.

The GCS material shall be improved with 2% cement for bonding and permeability purposes.

1306 LAYING AND COMPACTING GRADED CRUSHED STONE SUBBASE AND BASE

Add the following section:

Graded Crushed stone shall be laid by a paving machine.

SECTION 14 - CEMENT TREATED MATERIALS

1401 CEMENT TREATMENT

1401.1 Cement

Cement for improvement shall be CEM II, 42.5N Portland Cement manufactured to KS EAS 18-1: 2001 - Part 1, KS 1725: 2001 standards. The cement content for the treated material shall be between 2-3% of the total weight of gravel to be improved. In adopting the cement content for improvement care shall be taken to ensure that base quality improved gravel for sub-base is avoided. The Engineer shall exercise his discretion to any variation in the rate of application of the cement, which he may see fit to order from time to time.

1401.2 Lime Treatment

Lime treatment will be as outlined in the Standard Specifications for road and bridge construction. The lime content of the stabilized material shall be as indicated by the Engineer.

1401.3 Moisture Content and Compaction

The moisture content of the treated material shall be as directed by the Engineer but nevertheless within the range of 95% to 105% of the Optimum Moisture Content (AASHTO T180). Minimum compaction shall be 97% MDD (AASHTO T180").

1401.4 Mixing

The material to be treated and the cement shall be mixed in an approved batching plant.

1401.5 Laying and Compaction

Laying

Treated gravel 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 treated material shall be as directed by the Engineer but nevertheless within the range of 95% to 105% of the Optimum Moisture Content (AASHTO T 180). Minimum compaction shall be 95% MDD (AASHTO T 180).

1409 PROTECTION AND CURING

Protection and curing shall be carried out in accordance with the provisions of Clause 1409 (i) of the Standard Specification. The treated sub-base layer shall be kept continuously damp by spraying with water for seven days after laying to be followed by laying of GCS base-Course.

1412 MEASUREMENT AND PAYMENT

Stabilizer

The provision of the stabilizer shall be measured by the tonne calculated as the specific weight of stabilizer added to the material.

Mix-in Stabilizer

Mixing stabilizer into the material shall be measured by the cubic metre of treated material calculated as the product of the compacted sectional area treated and the length.

SECTION 15 - BITUMINOUS SURFACE TREATMENTS

PART A - GENERAL

1501A GENERAL

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, ALD of the chippings, surface conditions and requirements for specific locations. Application rates of the bitumen spray and the chippings 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, i.e.: -

a) Chippings

10/14mm size pre-coated chippings at a spread rate of 80-100 square meters per cubic meter as single seal.

b) Bitumen Spray Rates

0.8 - 1.2 l/m² of 60/70 penetration grade bitumen (cut back or straight run) for the single seal.

PART B - PRIME COAT AND TACK COAT

1502B MATERIALS FOR PRIME COAT AND TACK COAT.

For prime coat, the binder shall be a medium-curing cutback MC30 unless otherwise directed by the Engineer.

The rate of spray of bituminous prime coat refers to the gross volume of the cutback bitumen, that is to say the volume of the bitumen plus dilutants.

The rates of spray of the prime coat shall be as instructed by the Engineer and shall generally be within the range 1.0-1.2 litres/square metre.

Prime coat shall be applied to all gravel surfaces that are to receive asphalt concrete.

The tack coat shall consist of bitumen emulsion K1-70 unless otherwise directed by the Engineer.

The rates of spray of the tack coat shall be as instructed by the Engineer and shall generally be within the range 0.5 - 0.8 litres/square metre.

PART C - SURFACE DRESSING

1502C MATERIALS FOR SURFACE DRESSING

Binder

The bituminous binder shall be 60/70 penetration grade bitumen (cut-back with kerosene fuel in accordance with prevailing road temperatures or straight run), and conforming to Clause 211 of the Standard Specification.

The Contractor jointly with the Engineer shall carry out a minimum of five (5) bitumen affinity tests on each single size aggregate stockpiles to be used into the works and if any result is less than 95% coverage, then the binder shall be blended with **ColAmin** or similar approved adhesive additive as per manufacturer's instructions at 0.2 - 0.5% by mass of binder. The Contractor shall propose optimum dosage of the adhesive additive by carrying out bitumen affinity tests on the crushed aggregates for approval by the Engineer.

Chippings

Chippings shall be of class 2 material and shall comply in all respects with Clause 1502C of the Standard Specification. The contractor's attention is drawn to the requirements of Clause 1502C and 1504C of the Standard Specification with regard to cleanliness and dust content of chippings for surface dressing. Should it prove necessary in the Engineer's opinion to wash chippings, no extra payment will be made to the contractor for this operation.

1503C SPRAY AND SPREAD RATES OF BITUMEN AND CHIPPINGS

Spray and Spread Rates for bitumen and chippings cannot be calculated until samples of the chippings to be used are available for test.

After submission of samples and completion of laboratory tests on chippings and binder, the Contractor shall in the presence of the Engineer and the Chief Materials Engineer or representatives, lay trial sections of seal at various rates of spray and spread as directed by the Engineer and in accordance with clause 1503C of the Standard Specification.

Should any change occur in nature of source of chippings or bitumen, the Contractor shall advise the Engineer accordingly who will then decide if any revisions are required to the spray and spread rates.

If any changes are required, the Contractor shall carry out further trials as instructed by the Engineer.

Payment for binder and chippings will be based on the instructed spray and spread rates used which may not necessarily be those specified. The Engineer will specify the spray rates of bitumen as residual bitumen per square meter. Actual spray rates used by the Contractor must be adjusted to compensate for any cutter added.

1505C PRECOATED CHIPPINGS

Chippings utilized for surface dressing works under this contract shall be pre-coated in accordance with clause 1505C of the Standard Specification. The binder used for pre-coating chippings shall be MC30 cut-back bitumen.

The amount of bituminous binder used to pre-coat chippings will be as instructed by the Engineer and will normally be between 0.4% and 1.0% residual bitumen as percentage of the total dry weight.

Prior to laying any pre-coated chippings the Contractor shall prepare trial mixes of bitumen and chippings in the presence of the Engineer. After completion of trial mixes the Engineer shall issue written instructions to the Contractor indicating the amount of binder to be added in pre-coated chippings. The Contractor shall maintain this proportion unless the surface or nature of the chippings changes when the Contractor shall repeat the trials and the Engineer will issue revised instruction.

No separate payments shall be made for the pre-coating exercise. The contractor shall have included in his rates the cost of complying with this clause.

1511C MEASUREMENT AND PAYMENT

(a) Seal coat

Seal coats shall be measured by the litre, for each type of bituminous binder for each seal coat, calculated as the product of the area in square metres sprayed and the rate of application in litres/square metres instructed, corrected to 15.6 °C.

(b) Chippings

Chippings shall be measured by the cubic metre of each nominal size for each class calculated as the product of the area in square metres covered and the reciprocal of the instructed rate of application in square metres/cubic metre or the actual rate of application in square metres/cubic metre whichever calculation gives the lower volume.

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

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.

1605A DESIGN AND WORKING MIXES

Delete the second paragraph and insert the following:

At least two months, prior to laying asphalt concrete, the contractor jointly with the Engineer shall carry out design mixes STRICTLY complying with SUPERPAVE requirements (clause 1602B, 1603B & 1604B) using approved constituent materials.

The design process shall be phased as follows:

Phase 1: Testing of constituent materials to confirm compliance

Phase 2: Laboratory mix designs complying with all the specifications

Phase 3: Plant mixing to confirm compliance with laboratory parameters

Phase 4: Site trials

Should any changes occur in the nature or source of the constituent materials, the Contractor shall advise the Engineer and a new mix design shall be established using the procedure set above

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

Add the following at the end of the second paragraph:

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

1615A ROAD REINFORCEMENT GRID

Where shown on the drawings or where directed by the Engineer, asphalt reinforcement in form of geotextile shall be used to reduce reflective cracking and/or to act as water barrier.

Paving geotextile reinforcement composite shall consist of 'ARMAPAL' reinforcement geosynthetic or similar approved. It shall meet the following physical requirements.

Property	Units	Requirements	Test method
Tensile strength	KN/m	50	SABS O2210 - 88
Elongation at break	%	<7	SABS O2210 - 88
Melting point	°C	260	ASTM D276
Bitumen Retention	l/m ²	1.2	

Where the use of reinforcing for asphalt has been specified, the Contractor shall, at least three months before the material is to be used, submit samples of the type he/she intends to use, together with complete specifications of the material, load-strain relationship of the material, as well as the manufacturer's instructions for use, to the Engineer for approval. Where the material does not carry the mark of an acknowledged standards authority, the Engineer may instruct the Contractor to have the material tested by an approved laboratory and to submit the results.

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, and shall meet the requirements of Table 4.3 in ORN 19 as summarized below

TEST		Test Method (ASTM)	Pen 40/50	Pen 60/70	Pen 80/100
Based on original bitumen penetration					
at 25°C		D5	40-50	60-70	80-100
Softening point (°C)		D36	49-59	46-56	42-51
Flash point (°C)	Min	D92	232	232	219
Solubility in trichloroethylene (%)	Min	D 2042	99	99	99
TFOT heating for 5 hr at 163°C		D 1754			
a) Loss by mass (%)	Max		0.5	0.5	0.5
b) Penetration (% of original)	Min	D5	58	54	50
c) Ductility at 25°C	Min	D 113	~	50	75

The bitumen for asphalt concrete works shall be 60/70 penetration grade. The Contractor jointly with the Engineer shall carry out a minimum of five (5) bitumen affinity tests on each single size aggregate stockpiles to be used into the works and if any result is less than 95% coverage, then the binder shall be blended with **ColAmin** or similar approved adhesive additive as per manufacturer's instructions at 0.2 - 0.5% by mass of binder. The Contractor shall propose optimum dosage of the adhesive additive by carrying out bitumen affinity tests on the crushed aggregates for approval by the Engineer

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)

Table 16 B-1(b) Requirements of Aggregate

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
Particle shape	Flakiness Index (FI) ³	<25
Strength	Aggregate Crushing Value, (ACV) ⁴	< 25
	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 5cycles % loss	Sodium Sulphate Soundness (SSS) Coarse aggregate	<10
	Sodium Sulphate Soundness (SSS) Fine aggregate	<16
	Magnesium Sulphate Soundness (MSS) Coarse aggregate	<15
	Magnesium Sulphate Soundness (MSS) Fine aggregate	<20
Polishing	Polished Stone Value	>57
Water absorption	Water absorption, % ⁶	<2
Bitumen affinity	Immersion Mechanical Test: Index of retained Marshall stability, % ⁸	>75

	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

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 a 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 $145 \pm 5^{\circ}\text{C}$ 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 $110 \pm 3^{\circ}\text{C}$ 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 $> 120^{\circ}\text{C}$, 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.

1608B SEALING BITUMINOUS SURFACE

After the wearing course has been trafficked and bitumen has hardened, the wearing course shall be sealed with class 2, 10/14 mm pre-coated chippings in accordance with Clause 1505C. The period of hardening will depend on the traffic level and should be such that the chippings will not become embedded in the wearing surface. The Contractor will propose and the Engineer will approve a section to be ready for sealing

PART C – DENSE BITUMEN MACADAM FOR BASE**1601C DEFINITION**

Dense bitumen macadam produced from fresh materials shall comply with the "SUPERPAVE" requirements given in clauses 1602B, 1603B, 1604B, 1605B, 1606B and 1608B of these Special Specifications, except where modified below.

1603C REQUIREMENTS FOR DENSE BITUMEN MACADAM

The nominal binder content shall be 4.0 - 5.0 % for 37.5mm MAS. The binder content

of the working mix will be instructed by the Engineer following laboratory and site trials. For Marshall Mix Design Criteria, Modified Marshall Method for large aggregates shall be adopted as detailed under section 7.5 of MS2. The Maximum Aggregate Size (MAS) shall be limited to 37.5mm.

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
- Class 30/20 for bridge all bridge members: abutments, piers, beams and deck

Specifications for construction materials and quality control shall be in accordance with the standard specifications.

1713 FINISHES ON UNFORMED SURFACES

All unformed finishes shall be as follows:

- (i) All unformed surfaces in contact with water or the eye shall be finished to class UF 3 Finish in accordance with the standard specifications.
- (ii) All unformed surfaces in contact with soil or on which asphaltic concrete is to be laid shall be finished to class UF 2 Finish in accordance with the standard specifications.

The payment for such finishes shall paid in accordance with the standard specifications and as captured in the bill items.

1725 SURFACE FINISHES

All formed finishes shall be as follows:

- (i) All formed finishes in contact with water or the eye shall be finished to class F3 finish in accordance with the standard specifications.
- (ii) All formed surfaces in contact with soil shall be finished to class F 2 Finish in accordance with the standard specifications.

The payment for such finishes shall paid in accordance with the standard specifications and as captured in the bills items.

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

1901 APPLICABLE STANDARDS.

The latest applicable corresponding standards shall be applicable in lieu of those indicated in the Standard Specifications. In particular the following standards shall be applicable:

a) Steel

EN 10021, EN 10025-1, EN 10025-2
EN 10025-3
EN 10025-4
EN 10029 EN 10034 EN 10051
EN 10056-2 EN 10163-1
EN 10163-2 EN 10163-3
EN 10204 BS 4-1

(b) Bolts, Anchor Rods, Nuts and Washers

EN ISO 898-1
EN 20898-2
EN 14399-1, EN 14399-2
EN 14399-4
EN 14399-6
EN ISO 4017
EN ISO 4034, EN ISO 4032
DIN 7989-1
EN ISO 4026 DIN 976-1 DIN 125 DIN 529

(c) Galvanizing

EN ISO 1461, EN ISO 10684

(d) Elastomer

EN 1337-3
Structural bearings - Part 3: Elastomeric Bearings.

SECTION 20 - ROAD FURNITURE

2001 ROAD RESERVE BOUNDARY POSTS

Road reserve boundary posts shall be provided as directed by the Engineer and in compliance with Standard Specification clause 2001. They shall be placed at 100m intervals along the boundary of the road reserve.

2003 EDGE MARKER POSTS

Edge marker posts shall be Verge Master MK 111 plastic posts manufactured by Glasdon Ltd. of Blackpool UK or equivalent approved by the Engineer. They shall be provided as directed by the Engineer and in compliance with the requirements of 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.

The posts for the signs shall be cylindrical galvanised wrought iron tubes of minimum 75mm diameter and vandal-proofed by in-filling with concrete class 15/20.

The sign plates shall be made from approved metal or plastic sheet 3mm thick and vandal-proofed by the drilling of 3mm diameter holes at 100mm centres

The rate inserted for the signs shall include for all the costs of complying with this clause.

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. The signs shall be stored as directed by the Engineer.

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 stored as directed.

2005 ROAD MARKING

Paint for road marking shall be internally reflectorized hot applied thermoplastic material in accordance with Clause 219 of the Standard Specification complying to BS 3262 and BS 6088.

The rates inserted in the Bills of Quantities for road marking shall include for prior application of approved tack coat.

2006 GUARDRAILS

Guardrail posts shall be concrete 210 x 210 mm set vertically at least 1.2m into the shoulder as per the drawings and as directed by the Engineer.

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

"Swareflex" ART 3240 or similar approved guardrail reflectors two way reflective one side red and another white shall be installed on the flex beams every 4m.

The rate inserted shall include for provision of the flex beams, posts, Swareflex reflectors, flex beam end bits and installation in accordance with the standard specifications and drawings.

2007 KERBS**(a) Vertical Joints**

Vertical joints between adjacent kerbs shall not be greater than 5 mm in width and shall 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 and shall occur within a length of 2.0m

2008 KILOMETRE MARKER POSTS

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

2011 BOLLARDS

Where directed by the Engineer, the contractor shall provide and install class 20/20 200mm diameter reinforced concrete bollards concreted 300mm into the ground.

SECTION 21 ~ MISCELLANEOUS BRIDGE WORKS

2102 BRIDGE BEARINGS

Add the following

The bridge bearings shall be laminated elastomeric bearings to BS EN 1337-3

Structural bearings - Part 3: Elastomeric Bearings.

The contractor shall have the source of the bearings approved by Engineer and shall provide the engineer with a sample as shall be instructed for destructive testing. Upon importation of the bearings the engineer shall do random sampling for another sample for destructive testing to confirm the quality of the bearings to be used on the bridge.

The contractor shall make provision for the samples and their testing in his rates for other bearings since no separate payment shall be made for the test samples and their testing.

2105 GUARDRAILS TO BRIDGES

Delete and replace with the following:

The bridge crush barriers shall be of reinforced concrete as shown on drawings and shall be of the same concrete specification as for the concrete deck slab.

Their measurement and payment shall be in cubic metres under the relevant item under bill number 17.

2106 SURFACING TO BRIDGES

The surfacing to bridges shall consist of 50 mm thick Asphalt Concrete laid to the tolerances given in Section 3 of the Standard Specification.

SECTION 22 ~ DAYWORKS

2202 MEASUREMENTS AND PAYMENT

(a) Plant

Where items of major plant listed in the schedule of Dayworks are specified by type (e.g. Concrete mixer etc.) the power rating of such items of plant provided by the Contractor shall not be lower than the power ratings of such plant manufactured within the last two years prior to the date of BID. Any item of major plant employed upon Dayworks that has a power rating lower than specified above shall be paid for at rates lower than those in the schedule of Dayworks. The reduction in the rate payable shall be in proportion to the reduction in power rating below that specified above.

SECTION 23 - CONCRETE PAVEMENT

2301 SCOPE

This section covers construction of concrete pavement to carriageways in steep sections. All concrete works shall be constructed in accordance with Section 17 of these specifications.

2302 CONSTRUCTION METHODOLOGY

Prior to commencement of work, the Contractor shall submit his proposed work method statement and equipment utilization for mixing, spreading, compacting and finishing of the concrete slab for prior approval by the Engineer.

The concrete pavement will be laid on a separation membrane consisting of impermeable plastic sheeting of 125 micron thick laid shall be flat on the underlaying surface without creases. Where an overlap of the plastic sheets is necessary, this shall be at least 300mm. There shall be no standing water on or under the plastic sheet membrane when the concrete is placed upon it.

The Contractor shall construct a reinforced jointed concrete slab pavement of nominal strength 25 N/mm² and 200mm compacted thickness to the main carriageway with two layers of A193 steel mesh fabric reinforcement as shown on the drawings. The concrete slab shall be constructed between steel forms with joints at the approximate spacing indicated on the drawings.

All concrete shall be spread by a hopper type spreader with bottom gates to control discharge of concrete and capable of striking off concrete to produce a uniform surface. The concrete shall be compacted and finished by hand guided vibrating beam or a transverse oscillating screed. Alternatively, the concrete may be placed directly in place using concrete truck mixer or other approved means and compacted with poker vibrators, after the Contractor has demonstrated to the Engineer that the method will achieve the required concrete uniformity.

Contraction joints shall be formed by a groove sawn in the surface of the hardened concrete and an approved filler cast into the bottom of the slab, all as shown on the drawings. The sawn groove shall be located vertically above the filler to within a tolerance of ± 12 mm. Dowel bars shall be provided as shown in the drawings in the positions indicated.

Joint sealant shall be cold applied two-part polysulphide sealing compound complying with BS 4254:1983.

2303 TOLERANCES AND FINISHING

The concrete slab shall comply with tolerance requirements of clause 302 of the standard specification applicable for bituminous binder course. In particular, the centerline of the slab surface and all other parallel alignments shall be correct within ± 13 mm from the centerline as shown on the drawings or calculated from the drawings.

The average thickness of the slab measured at five points in any length of 100m shall not be less than 100% nor more than 120% of the thickness specified or ordered by the Engineer. In addition, the thickness at any point shall not be less than 98% or more than 125% of the thickness specified or ordered by the Engineer.

Immediately after the final pass of the finishing machine or vibrating beam, the surface of the concrete shall be brushed in a direction at right angles to the center-line of the carriageway with a broom sufficiently stiff to produce a light brush-marked surface texture 1 mm deep to the satisfaction of the Engineer.

2304 CURING

Immediately after the concrete surface has been finished, curing shall be carried out for a period of at least 7 days by application of mechanically sprayed liquid curing compound as Sika® Antisol A at the rate of at least 0.22 litres/m² or similar approved synthetic resin based aluminized curing compound complying with ASTM C309-89, Class B and BS 7542-1992.

2305 GROOVING

Transverse grooving of width 5mm and depth 5mm at 45mm spacings shall be sawn on the concrete as soon as it has hardened sufficiently and shall be done with electronically controlled machines

equipped with cutting heads composed of multiple 12-inch diameter diamond tipped cutting blades.

2306

MEASUREMENT AND PAYMENTS

(a) Item: Concrete Pavement

Unit: m3

The concrete slabs shall be measured and paid by the cubic metre of the finished pavement for each pavement type instructed.

The rate shall include for provision of all materials, including separation membrane, concrete, dowel bars, and mesh fabric reinforcement where applicable, joints, curing and finishing complying with these specifications and the construction drawings.

SECTION 25 - HIV/AIDS, GENDER ISSUES, SOCIAL ISSUES AND LOCAL PARTICIPATION

2501 SCOPE

This specification sets out the Contractor's obligations with regard to on-site HIV/AIDS awareness campaign and preventive measures which are to be instituted.

2502 INTERPRETATION AND DOCUMENTATION

The following documents shall inter-alia be read in conjunction with this specification:

- The Instructions to Bidders;
- The Conditions of Contract;
- The Drawings;

2503 GENERAL REQUIREMENTS**(a) HIV/AIDS Awareness Campaign**

The Contractor shall institute an HIV/AIDS awareness campaign amongst his workers for the duration of the contract. As part of the campaign the Contractor will be required to display AIDS awareness posters in all buildings frequented by workers employed on the contract, where such buildings fall under the control of the Contractor. In addition, at least ten (10) of the Contractor's vehicles, regularly used on site shall display HIV/AIDS awareness posters. The posters shall be printed on gloss paper and shall be at least A1 size on buildings and A3 size, or other approved size on vehicles. The message on the posters shall be supplied by the Employer through the Engineer before the posters are printed.

Aids awareness shall also be included in the orientation process of all workers employed on the contract.

(b) AIDS Prevention Campaign

The Contractor shall institute an HIV/AIDS prevention campaign amongst his workers for the duration of the contract. As part of the campaign the Contractor will be required to make condoms available to workers. The condoms shall be from an approved manufacturer and comply with the current ISO Standards or WHO/UNAIDS Specifications and Guidelines for Condoms, 1998, or any more recent publication. The Contractor shall make available at least 4,000 condoms every month, through dispensing machines or other approved method of distribution. The Contractor shall at all times keep the site adequately supplied with condoms.

(c) HIV/AIDS Training**Introduction**

HIV/AIDS is having a significant and increasing impact in Kenya. Interventions that stimulate the movement of people increase both the exposure to the HIV virus and the spread of the virus. Road construction has been identified as one such intervention.

KenHA policy is to integrate HIV/AIDS awareness and prevention into all road construction and rehabilitation programmes. This is in accordance with the Third National Strategic Plan (2000-5) for HIV/AIDS prevention and control as approved by the Government of Kenya, International Bank for Reconstruction and Development (IBRD) and other organisations.

The project will involve both local labour and other contractor's labour. It is a contractual requirement for the Contractor to carry out HIV/AIDS awareness and prevention activities during the construction period as stipulated in this specification.

Objective

The objective of the HIV/AIDS training programme is to reduce the risk of exposure to and spread of the HIV virus in the area influenced by the construction. The target group will be local labourers and their supervisors employed by the works contractors. The wider community will benefit indirectly through their normal day-to-day interaction with the target group.

Scope of activities

Activities for HIV/AIDS awareness and prevention will be broad-based, targeting both individuals and groups. They may consist of:

- (i) Information posters in public places, both on and offsite (eating houses, bars, guest houses, etc.) and on contractor's vehicles.
- (ii) Availability of socially marketed condoms.
- (iii) Peer educators (reference people) drawn from the local labour and educated in HIV/AIDS issues for discussions with colleagues (estimate 1 per 50 employees).
- (iv) Small focus group discussions to disseminate information covering key issues.
- (v) Theatre groups and video presentations.
- (vi) Promotional events (such as football matches) to encourage openness and discussion of HIV/AIDS issues.
- (vii) Promotional bill boards to raise awareness of the integration of construction and HIV/AIDS activities.
- (viii) Inclusion of HIV/AIDS activities at site meetings with the District Aids Committee and other approved representatives.
- (ix) Availability of promotional materials such as T-shirts, caps, bumper stickers, key rings, etc.

The scope of activities may be tailored as required to meet the perceived needs and priorities of the labourers, and should involve participatory approaches to ensure that they are appropriate and have a public health impact. The scale and frequency of activities may also be adjusted to suit requirements of the target group. Education will cover:

- (a) preventive behaviours including partner reduction, condom use, awareness and appreciation of the importance of treatment of sexually transmitted infections (STIs);
- (b) skills including negotiating safer sex, correct condom use, purchase of condoms without embarrassment; and
- (c) referral to local health centres and available services.

Tasks to be undertaken to support the above activities include:

- (a) Establishing the status and focus of all current and planned HIV/AIDS activities in the area to ensure complementarity and determining potential involvement in project activities.
- (b) Carrying out a brief review of regional activities combining road construction with HIV/AIDS campaigns to determine options, best practice key issues, constraints, etc.
- (c) Reviewing of Information, Education and Communication (IEC) materials available and their relevance to road construction, making recommendations for future development of IEC materials.
- (d) Providing education and training for site personnel, supervisors and peer educators for the scope of activities as above.
- (e) Providing supervision for peer educators to ensure sustained quality of education. Incentives for their continual work may be small promotional items such as T-shirts, caps, etc.
- (f) Providing mechanisms for the social marketing of condoms and distribution of materials.
- (g) Monitoring activities regularly to assess effectiveness and impact. This should include an initial, interim and final assessment of basic knowledge, attitude and practices (KAP) taking account of existing data sources and recognising the limitations due to the short time-frame to show behaviour change. The KAP will be supported by qualitative information from focus group discussions.

Collaboration

HIV/AIDS activities are coordinated nationally by the National Aids Control Council (NACC). KeNHA, in consultation with NACC and the Ministry of Health (MOH), will co-ordinate with the provincial, district and local representatives. Representatives of local health authorities will be invited to attend training and communication activities.

Activities on the construction site will be linked as far as possible with on-going HIV/AIDS awareness and prevention in the area. This will ensure complementarity of approaches, reinforcing education and minimizing duplication. In addition, these links will ensure that the target group will have access to continued information after the end of the construction period.

Contractor Responsibilities

The Contractor will employ and designate a qualified HIV/AIDS expert fulltime, to be approved by the Engineer, who will work closely with the Client, MOH and other implementing agencies to support the HIV/AIDS awareness and prevention activities. This will ensure maximum effectiveness and integration with construction activities. Specific, but not exclusive, issues to be addressed by the Contractor are:

- (i) Scheduling appropriate timing and durations of the implementation of HIV/AIDS activities as part of work plan for labourers and supervisors. Designated rest times such as lunch breaks and pay days should be excluded.
- (ii) Identification of suitable individuals from recruitment records for education with the implementing organization.
- (iii) Provision of suitable sites for communication activities and for condom distribution.
- (iv) Monitoring of the implementation of peer educator activities.
- (v) Provision of support as necessary to the implementing organization.

Inputs

An organization experienced in the provision of HIV/AIDS awareness and prevention activities will be selected as a subcontractor to provide the above scope of activities on behalf of the main Contractor.

Reporting

The implementing organization will produce the following reports to be submitted to the Contractor, The Engineer, KeNHA and NACC:

- monthly progress briefs for inclusion in site meetings.
- quarterly reports detailing activities carried out, issues, follow up, etc.
- a review report of activities in the road construction sector,
- a review report of existing IEC materials with recommendations for development of materials specifically for the road sector.
- a final report detailing the methodology and activities carried out under this project including lessons learnt, impact, liaison with the Contractor and other parties, etc.

In addition, a report with the recommended approach for integration of HIV/AIDS awareness and prevention activities in the road construction sector will be produced. This will be a synthesis of project activities including contractual approaches, communication activities, availability of materials, liaison with existing organisations, etc. It will be developed with all parties involved in the construction activities to ensure the wide range of views and experiences is gained.

The final report and recommended approach will be presented to KURA, NACC and other interested organisations including private sector, funding agencies and NGO's.

Timing

Activities shall commence at the start of the construction period and continue through-out the 24 months to ensure a sustained impact. Reporting and dissemination activities shall continue for three months after the project is completed to ensure integration into current practice.

2504**MEASUREMENT AND PAYMENT**

The payment items in this clause shall include full compensation for all work associated with the provision of HIV/AIDS related services as specified.

Item: Instituting an HIV/AIDS awareness and prevention campaign
Unit: months

The unit of measurement shall be the calendar month or part thereof, measured over the duration of the campaign. The tendered rate shall include full compensation for equipment, labour, materials including the procurement and distribution of condoms and full compensation for transport, meals, accommodation and any other reasonable allowances for the Participation of local health authorities,

provincial director of health and NACC and other resources required for the provision of the service in compliance with clause 2503 (a) & (b) above.

Item: Instituting an HIV/AIDS Training – Engagement of specialist HIV/AIDS sub-contractor

Unit: Provisional Sum

Compensation for HIV/AIDS Specialists and resources for the implementation of Clause 2503(c). Any amount required under this item will be paid as per the programme approved by the Engineer and the Client (KeNHA) prior to expenditure.

SECTION 26 ~ ROAD SAFETY CAMPAIGN**2610. SCOPE**

This specification sets out the Contractor's obligations with regard to on-site road safety campaign which is to be conducted during the construction period. The aim of this road safety campaign is to achieve safe road use in the project area.

Indeed, an improved roadway complete with paved surface will undoubtedly encourage more vehicular traffic and will allow vehicles to travel at higher average speeds. This will increase the possibility for accidents between vehicles, and with non-motorized traffic such as cyclists, pedestrians and both domestic and wild animals.

Although the improved road will be wider in certain areas, thus making it safer to travel at higher speeds, there is still likelihood of collisions between vehicles and with vehicles and bicycles, pedestrians, and livestock (and wildlife).

Due to poor road conditions over the years, people, animals, NMTs, and particularly children are unaware of the danger of a fast approaching vehicle and may cross the road in front of it. This impact is likely to be serious during daytime hours when traffic is heavier and when drivers are able to move faster. Thus the Contractor shall conduct a road safety campaign in order to increase the awareness of the dangers of the road among the communities living alongside the project road, the Contractor's and the Consultant's workers.

2611. GENERAL REQUIREMENTS**a) Road safety campaign**

The Contractor shall institute a road safety campaign amongst his workers, and the communities living alongside the road, for the duration of the contract. As part of the campaign the Contractor will be required to display road safety posters in all buildings frequented by workers employed on the contract, where such buildings fall under the control of the Contractor, and in all schools and public buildings within the road project area. In addition, at least three (3) of the Contractor's vehicles, regularly used on site shall display road safety posters. The posters shall be printed on glossy paper and shall be at least A1 size on buildings and A3 size, or other approved size on vehicles. The message on the posters shall be supplied by the Employer through the Engineer before the posters are printed.

b) Road safety training**Objective**

The objective of the road safety campaign is to reduce the risk of exposure to road accidents in the area of the road. The target groups will be the public alongside the road, especially the children in schools and community chiefs of the, but also local labourers and their supervisors employed by the works contractors. The wider community will benefit indirectly through their normal day-to-day interaction with the target groups.

Scope of activities

Activities for road safety awareness will be broad-based targeting both individuals and groups. They may consist of:

- i) Information posters in public places both on and offsite (eating houses, bars, guest houses, etc.) and on contractor's vehicles,
 - ii) Peer educators (reference people) drawn from the local labour, and from the local communities, and educated in road safety issues for discussions with colleagues or the local community members,
 - iii) Small focus group discussions and information covering key issues,
 - iv) Theatre groups and video presentations, v) Promotional events (such as football matches) to encourage openness and discussion of road safety issues,
 - v) Promotional bill boards to raise awareness of the integration of construction and road safety activities,
-

- vi) Availability of promotional materials such as T-shirts, caps, bumper stickers, key rings, etc.

The scope of activities may be tailored as required to meet the perceived needs and priorities of the local communities and the workers, determined by participatory approaches to ensure they are appropriate, desired and have a public impact. The scale and frequency of activities may also be adjusted to suit requirements of the target groups. Education will cover:

- preventive behaviours including safe road crossing, walking on shoulders and not on the carriageway;
- referral to local information centres and services available.

Tasks to support the above activities will be to:

- i) Establish the status and focus of all current and planned road safety campaign activities in the area to ensure complementarity and determine potential involvement in project activities.
- ii) Carry out a brief review of regional activities combining road construction with road safety campaigns to determine options, best practice key issues, constraints, etc.
- iii) Review of Information, Education and Communication (IEC) materials available and their relevance to road construction, making recommendations for future development of IEC materials.
- iv) Provide education and training for site personnel, supervisors, local community members, and peer educators for the scope of activities as above.
- v) Provide supervision for peer educators to ensure sustained quality of education. Incentives for their continual work may be small promotional items such as T - shirts, caps, etc.
- vi) Monitor activities regularly to assess their effectiveness and impact. This should include an initial, interim and final assessment of basic knowledge, attitude and practices (KAP) taking account of existing data sources and recognizing the limitations due to the short time frame to show behaviour change. The KAP will be supported by qualitative information from focus group discussions.

Contractor's Responsibilities

The Contractor will designate a qualified road safety expert, to be approved by the Engineer, who will work closely with the Client and other implementing agencies to support the road safety campaign activities. This will ensure maximum effectiveness and integration with construction activities. Specific but not exclusive issues to be addressed by the Contractor are:

- Scheduling of appropriate timing and duration for the implementation of the road safety campaign as part of the work plan.
- Identification of suitable individuals for education from recruitment records with the implementing organization and from within the local communities.
- Provision of suitable sites for communication activities.
- Monitoring of the implementation of peer educator activities.
- Provision of support as necessary to the implementing organization and local communities.

Inputs

An organization experienced in the provision of road safety campaigns will be selected as a subcontractor to provide the above scope of activities on behalf of the main Contractor.

Reporting

The implementing organization will produce the following reports to be submitted to the Contractor, the Engineer, and the Employer:

- monthly progress briefs for inclusion in site meetings
- quarterly reports detailing activities carried out, issues, follow up, etc.
- a review report of activities in the road construction sector,
- a review report of existing IEC materials with recommendations for development of materials specifically for the road sector
- a final report detailing the methodology and activities carried out under this project including lessons learnt, impact, liaison with the Contractor and other parties, etc.

Timing

Activities shall commence at the start of the construction period and continue throughout the Contract duration to ensure a sustained impact. Reporting and dissemination activities shall continue for three months after the project is completed to ensure integration into current practice.

2612. MEASUREMENT AND PAYMENT

The payment for items in this clause shall include full compensation for all work associated with the provision of road safety campaign related services as specified.

Item: Instituting a Road Safety Awareness Campaign

Unit: months

The unit of measurement shall be the calendar month or part thereof, measured over the duration of the campaign. The tendered rate shall include full compensation for equipment, labour and material required for the provision of the service.

Item: Instituting an Accident Prevention Campaign

Unit: months

The unit of measurement shall be the calendar month or part thereof, measured over the duration of the campaign. The tendered rate shall include full compensation for equipment, labour and material required for the provision of the service.

Item: Road Safety Training

Unit: Provisional Sum

Compensation for road safety specialists for the implementation of the Training element of Clause 26 03 (b).

Any amount required under this item will be approved by the Engineer, prior to expenditure. Handling costs and profit in respect of this sub-item will be paid as a percentage (%) of the Provisional Sum expended

SECTION VII - DRAWINGS

The drawings referred to in the Conditions of Contract and the Technical Specifications are bound separately in Volume II of the Bidding Documents, together with such further drawings and amendments as shall be made and issued by the Engineer during the execution of the Contract.

SUPPLEMENTARY INFORMATION

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VIII - General Conditions of Contract 1. GENERAL CONDITIONS**1. General Provisions****1.1 Definitions**

In the Conditions of Contract (“these Conditions”), which include Particular Conditions, Parts A and B, and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1 The Contract

“Bills of Quantities”, “Daywork Schedule” and “Schedule of Payment Currencies” mean the documents so named (if any) which are comprised in the Schedules.

“Contract Agreement” means the contract agreement referred to in Sub-Clause 1.6 [Contract Agreement].

“Contract” means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Specification, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.

“Drawings” means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Entity in accordance with the Contract.

“Laws” means all national legislation, statutes, ordinances, and regulations and by-laws of any legally constituted public authority.

“Letter of Acceptance” means the letter of formal acceptance, signed by the contractor and the Procuring Entity, including any annexed memoranda comprising agreements between and signed by both Parties.

“Letter of Tender” means the document entitled letter of tender or letter of tender, which was completed by the Contractor and includes the signed offer to the Procuring Entity for the Works.

“SCC” means the Special Conditions of Contract completed by the Procuring Entity which modify the General Conditions of Contract.

“Schedules” means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Bills of Quantities, data, lists, and schedules of rates and/or prices.

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

“Tender” means the Letter of Tender and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.

1.1.2 Parties and Persons

“Contractor's Personnel” means the Contractor's Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labor and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

“Contractor's Representative” means the person named by the Contract or in the Contractor

appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.

“Contractor” means the person(s) named as contractor in the Letter of Tender accepted by the Procuring Entity and the legal successors in title to this person(s).

“Engineer” means the person appointed by the Procuring Entity to act as the Engineer for the purposes of the Contract and named in the **SCC**, or other person appointed from time to time by the Procuring Entity and notified to the Contractor under Sub-Clause 3.4 [Replacement of the Engineer].

“Party” means the Procuring Entity or the Contractor, as the context requires.

“Procuring Entity” means the Entity named in the Special Conditions of Contract.

“Procuring Entity's Personnel” means the Engineer, the assistants referred to in Sub-Clause 3.2 [Delegation by the Engineer] and all other staff, labor and other employees of the Engineer and of the Procuring Entity; and any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as Procuring Entity's Personnel.

“Procuring Entity” means the person named as Procuring Entity in the **SCC** and the legal successors in title to this person.

“Subcontractor” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.

1.1.3 Dates, Tests, Periods and Completion

“Base Date” means a date 30 day prior to the submission of tenders.

“Commencement Date” means the date notified under Sub-Clause 8.1 [Commencement of

Works]. **“Completion Certificate”** means the certificate issued under Sub-Clause 11.9

[Performance Certificate]. **“Day”** means a calendar day and **“year”** means 365 days.

“Defects Notification Period” means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], which extends over 365 days except if otherwise stated in the **SCC** (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].

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

“Tests after Completion” means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Procuring Entity.

“Tests on Completion” means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Procuring Entity.

“Time for Completion” means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the **SCC** (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.

1.1.4 Money and Payments

“Accepted Contract Amount” means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.

“Contract Price” means the price defined in Sub-Clause 14.1 [The Contract Price] and includes adjustments in accordance with the Contract.

“Cost” means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

“Final Payment Certificate” means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].

“Final Statement” means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].

“Foreign Currency” means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.

“Interim Payment Certificate” means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.

“Local Currency” means the currency of the Country.

“Payment Certificate” means a payment certificate issued under Clause 14 [Contract Price and Payment].

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

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

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

1.1.5 Works and Goods

“Contractor's Equipment” means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Procuring Entity's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

“Goods” means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

“Materials” means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

“Permanent Works” means the permanent works to be executed by the Contractor under the Contract.

“Plant” means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Procuring Entity and relating to the construction or operation of the Works.

“Section” means a part of the Works specified in the SCC as a Section (if any).

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

“Works” mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.1.6 Other Definitions

“Contractor's Documents” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

“Country” means Kenya as the country in which the Site is located, where the Permanent Works are to be executed.

“Force Majeure” is defined in Clause 19 [Force Majeure].

“Laws” means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.

“Notice of Dissatisfaction” means the notice given by either Party to the other under Sub-Clause 20.4 indicating its dissatisfaction and intention to commence arbitration.

“Performance Security” means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].

“Procuring Entity's Equipment” means the apparatus, machinery and vehicles (if any) made available by the Procuring Entity for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Procuring Entity.

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

“Unforeseeable” means not reasonably foreseeable by an experienced contractor by the Base Date.

“Variation” means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

12 Interpretation

In the Contract, except where the context requires otherwise:

- a) Words indicating one gender include all genders;
- b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- c) provisions including the word “agree”, “agreed” or “agreement” require the agreement to be recorded in writing;
- d) “written” or “inwriting” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and
- e) the word “tender” is synonymous with “tender” and “tenderer” with “Tenderer” and the words “tender documents” with “tendering documents.”

13 Communications

- 1.3.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents,

determinations, notices, requests and discharges, these communications shall be:

- a) In writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the **SCC**; and
- b) Delivered, sent or transmitted to the address for the recipient's communications as stated in the **SCC**. However:
 - i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

- 1.3.2 Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

14 Law and Language

- 1.4.1 The Contract shall be governed by the **laws of Kenya**.

- 1.4.2 The ruling language of the Contract shall be the **English Language**.

15 Priority of Documents

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

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

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

16 Contract Agreement

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

17 Assignment

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

- a) May assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and
- b) May, as security in favor of a Procuring Entity or financial institution, assign its right to any moneys due, or to become due, under the Contract.

18 Care and Supply of Documents

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

19 Delayed Drawings or Instructions

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

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- 1.9.2 After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 1.9.3 However, if and to the extent that the Engineer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

1.10 Procuring Entity's Use of Contractor's Documents

- 1.10.1 As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor. The Contractor shall be deemed (by signing the Contract) to give to the Procuring Entity a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:
- a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
 - b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
 - c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.
- 1.10.2 The Contractor's Documents and other design documents made by (or on behalf of) the Contractor

shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Procuring Entity for purposes other than those permitted under this Sub-Clause.

1.11 Contractor's Use of Procuring Entity's Documents

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

1.12 Confidential Details

The Contractor's and the Procuring Entity's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify compliance with the Contract and allow its proper implementation.

1.13 Compliance with Laws

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

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

1.14 Joint and Several Liability

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

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

1.15 Inspections and Audit by the Procuring Entity

Pursuant to paragraph 2.2 e. of Appendix B to the General Conditions, the Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Procuring Entity and/or persons appointed by the Procuring Entity to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Procuring Entity if requested by the Procuring Entity. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 15.6 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Procuring Entity's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Procuring Entity's prevailing sanctions procedures).

2 THE PROCURING ENTITY

2.1 Right of Access to the Site

- 2.1.1 The Procuring Entity shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the **SCC**. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Procuring Entity is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Procuring Entity shall do so in the time and manner stated in the Specification. However, the Procuring Entity may withhold any such right or possession until the Performance Security has been received.
- 2.1.2 If no such time is stated in the **SCC**, the Procuring Entity shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].
- 2.1.3 If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Procuring Entity to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- 2.1.4 After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 2.1.5 However, if and to the extent that the Procuring Entity's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

2.2 Permits, Licenses or Approvals

The Procuring Entity shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:

- a) Copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
- b) Any permits, licenses or approvals required by the Laws of the Country:
 - i) Which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
 - ii) For the delivery of Goods, including clearance through customs, and
 - iii) For the export of Contractor's Equipment when it is removed from the Site.

2.3 Procuring Entity's Personnel

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

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

2.4 Procuring Entity's Financial Arrangement

- 2.4.1 The Procuring Entity shall submit, before the Commencement Date and thereafter within 30 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Procuring Entity to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment].

Before the Procuring Entity makes any material change to his financial arrangements, the Procuring Entity shall give notice to the Contractor with detailed particulars.

- 242 In addition, if the Procuring Entity has notified to the Contractor that the Procuring Entity has suspended disbursements under its loan, which finances in whole or in part the execution of the Works, the Procuring Entity shall give notice of such suspension to the Contractor with detailed particulars, including the date of such notification, with a copy to the 2.4.3 Engineer, within 7 days of the Procuring Entity having received the suspension notification from the Procuring Entity. If alternative funds will be available in appropriate currencies to the Procuring Entity to continue making payments to the Contractor beyond a date 60 day after the date of Procuring Entity notification of the suspension, the Procuring Entity shall provide reasonable evidence in his notice of the extent to which such funds will be available.

25 Procuring Entity's Claims

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

3 THE ENGINEER

3.1 Engineer's Duties and Authority

- 3.1.1 The Procuring Entity shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Procuring Entity before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Procuring Entity shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

- 3.1.2 However, whenever the Engineer exercises a specified authority for which the Procuring Entity's approval is required, then (for the purposes of the Contract) the Procuring Entity shall be deemed to have given approval. Except as otherwise stated in these Conditions:
- Whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Procuring Entity; the Engineer has no authority to relieve either Party of any duties, obligations or
 - any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal,

request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances; and

- c) any act by the Engineer in response to a Contractor's request except as otherwise expressly specified shall be notified in writing to the Contractor within 14 days of receipt.

3.12 The following provisions shall apply; The Engineer shall obtain the specific approval of the Procuring Entity before taking action under the following Sub-Clauses of these Conditions:

- a) Sub-Clause 4.12: agreeing or determining an extension of time and/or additional cost.
- b) Sub-Clause 13.1: instructing a Variation, except;
 - i) In an emergency situation as determined by the Engineer, or
 - ii) If such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the SCC.
- c) Sub-Clause 13.3: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 or 13.2.
- d) Sub-Clause 13.4: Specifying the amount payable in each of the applicable currencies.

3.13 Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Procuring Entity, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Procuring Entity.

3.2 Delegation by the Engineer

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

3.22 Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

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

3.3 Instructions of the Engineer

3.31 The Engineer may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

- 332 The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:
- a) Gives an oral instruction,
 - b) Receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
 - c) Does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation, then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).

3.4 Replacement of the Engineer

If the Procuring Entity intends to replace the Engineer, the Procuring Entity shall, not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer. If the Contractor considers the intended replacement Engineer to be unsuitable, he has the right to raise objection against him by notice to the Procuring Entity, with supporting particulars, and the Procuring Entity shall give full and fair consideration to this objection.

3.5 Determinations

- 351 Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.
- 352 The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars, within 30 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

4 THE CONTRACTOR

4.1 Contractor's General Obligations

- 4.1.1 The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works.
- 4.1.2 The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.
- 4.1.3 All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country as defined by the Procuring Entity.
- 4.1.4 The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.
- 4.1.5 The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.

- 4.1.6 The Contractor shall not commence any Works, including mobilization and/or pre-construction activities (e.g. limited clearance for haul roads, site accesses and work site establishment, geotechnical investigations or investigations to select ancillary features such as quarries and borrowpits), unless the Engineer is satisfied that appropriate measures are in place to address environmental, social, health and safety risks and impacts.
- 4.1.7 If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Particular Conditions:
- a) The Contractor shall submit to the Engineer the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
 - b) These Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Engineer to add to the Drawings for co-ordination of each Party's designs;
 - c) The Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
 - d) Prior to the commencement of the Tests on Completion, the Contractor shall submit to the Engineer the "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification and insufficient detail for the Procuring Entity to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

42 Performance Security

- 42.1 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings.
- 42.2 The Contractor shall obtain (at his cost) a Performance Security for proper performance, in the amount stated in the SCC and denominated in the currency (ies) of the Contractor in a freely convertible currency acceptable to the Procuring Entity. If an amount is not stated in the SCC, this Sub-Clause shall not apply.
- 42.3 The Contractor shall deliver the Performance Security to the Procuring Entity within 14 days after receiving the Letter of Acceptance and shall send a copy to the Engineer. The Performance Security shall be issued by a reputable Procuring Entity or financial institution selected by the Contractor and shall be in the form annexed to the Particular Conditions, as stipulated by the Procuring Entity in the SCC, or in another form approved by the Procuring Entity.
- 42.4 The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.
- 42.5 The Procuring Entity shall not make a claim under the Performance Security, except for amounts to which the Procuring Entity is entitled under the Contract.
- The Procuring Entity shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Procuring Entity was not entitled to make the claim.
- 42.6 The Procuring Entity shall return the Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.

- 42.7 Without limitation to the provisions of the rest of this Sub-Clause, whenever the Engineer determines an addition or a deduction to the Contract Price as a result of a change in cost and/or legislation, or as a result of a Variation, amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage.

43 Contractor's Representative

- 43.1 The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract. Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint a replacement.

- 43.2 The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Engineer's prior consent, and the Engineer shall be notified accordingly.

- 43.3 The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at anytime revoke the delegation. Any delegation or revocation shall not take effect until the Engineer has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

- 43.4 The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

44 Subcontractors

- 44.1 The Contractor shall not subcontract the whole of the Works.

- 44.2 The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Particular Conditions:

- a) The Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
- b) The prior consent of the Engineer shall be obtained to other proposed Sub contractors;
- c) the Contractor shall give the Procuring entity not less than 14 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and
- d) each subcontract shall include provisions which would entitle the Procuring Entity to require the subcontract to be assigned to the Procuring Entity under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity].

443 The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.

444 Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.

45 Assignment of Benefit of Subcontract

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

46 Co-operation

46.1 The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- a) The Procuring Entity's Personnel,
- b) Any other contractors employed by the Procuring Entity, and
- c) The personnel of any legally constituted public authorities, who may be employed in the execution on or near the Site of any work not included in the Contract.

46.2 Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to suffer delays and/or to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

If, under the Contract, the Procuring Entity is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Engineer in the time and manner stated in the Specification.

47 Setting Out

47.1 The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

The Procuring Entity shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

47.2 If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

47.3 After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this.

48 Safety Procedures

The Contractor shall:

- a) Comply with all applicable safety regulations,
- b) Take care for the safety of all persons entitled to be on the Site,
- c) Use reasonable efforts to keep the Site and Works clear of unnecessary obstructions as to avoid danger to these persons,
- d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Procuring Entity's Taking Over], and
- e) Provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

49 Quality Assurance

- 49.1 The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.
- 49.2 Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor itself shall be apparent on the document itself. Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

4.10 Site Data

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

4.11 Sufficiency of the Accepted Contract Amount

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

necessary for the proper execution and completion of the Works and the remedying of any defects.

4.12 Unforeseeable Physical Conditions

4.12.1 In this Sub-Clause, “physical conditions” means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

4.12.2 If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Engineer as soon as practicable.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Engineer may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

4.12.3 If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor's Claims] to:

- a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) Payment of any such Cost, which shall be included in the Contract Price.

4.12.4 Upon receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

4.12.5 However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favorable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favorable conditions were encountered, the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in any reduction in the Contract Price.

4.12.6 The Engineer shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of any such evidence.

4.13 Rights of Way and Facilities

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

4.14 Avoidance of Interference

4.14.1 The Contractor shall not interfere unnecessarily or improperly with:

- a) The convenience of the public, or
- b) The access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Procuring Entity or of others.

- 4.14.2 The Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

415 Access Route

- 4.15.1 The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable effort to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

- 4.15.2 Except as otherwise stated in these Conditions:

- a) The Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- c) the Procuring Entity shall not be responsible for any claims which may arise from the use or otherwise of any access route;
- d) the Procuring Entity does not guarantee the suitability or availability of particular access routes; and
- e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

416 Transport of Goods

Unless otherwise stated in the Particular Conditions:

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

417 Contractor's Equipment

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

418 Protection of the Environment

- 4.18.1 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.
- 4.18.2 The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

419 Electricity, Water and Gas

- 4.19.1 The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the

Specifications, for the tests.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

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

420 Procuring Entity's Equipment and Free-Issue Materials

- 420.1 The Procuring Entity shall make the Procuring Entity's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification:

- a) The Procuring Entity shall be responsible for the Procuring Entity's Equipment, except that
- b) The Contractor shall be responsible for each item of Procuring Entity's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

- 420.2 The appropriate quantities and the amounts due (at such stated prices) for the use of Procuring Entity's Equipment shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.

The Procuring Entity shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Procuring Entity shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them and shall promptly give notice to the Engineer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Procuring Entity shall immediately rectify the notified shortage, defect or default.

- 420.3 After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Procuring Entity of liability for any shortage, defect or default not apparent from a visual inspection.

421 Progress Reports

- 421.1 Unless otherwise stated in the Particular Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

- 421.2 Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

- 421.3 Each report shall include:

- a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- b) photographs showing the status of manufacture and of progress on the Site;
- c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - i) commencement of manufacture,
 - ii) Contractor's inspections,

- iii) tests, and
- iv) shipment and arrival at the Site;
- d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- e) copies of quality assurance documents, test results and certificates of Materials;
- f) list of notices given under Sub-Clause 2.5 [Procuring Entity's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.21.4 The Contractor shall provide immediate notification to the Engineer of incidents in the following categories. Full details of such incidents shall be provided to the Engineer within the time frame agreed with the Engineer.

- a) confirmed or likely violation of any law or international agreement;
- b) any fatality or serious injury;
- c) significant adverse effects or damage to private property (e.g. vehicle accident, damage from fly rock, working beyond the boundary);
- d) major pollution of drinking water aquifer or damage or destruction of rare or endangered habitat (including protected areas) or species; or
- e) any allegation of sexual harassment or sexual misbehavior, child abuse, defilement, or other violations involving children.

4.22 Security of the Site

Unless otherwise stated in the Particular Conditions:

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

4.23 Contractor's Operations on Site

4.23.1 The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Engineer as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

4.23.2 Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

4.24 Fossils

4.24.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological

or archaeological interest found on the Site shall be placed under the care and authority of the Procuring Entity. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

4242 The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

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

5. NOMINATED SUB CONTRACTORS

5.1 Definition of “nominated Subcontractor

In the Contract, “nominated Subcontractor” means a Subcontractor:

- a) Who is stated in the Contract as being a nominated Subcontractor, or
- b) whom the Engineer, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].

5.2 Objection to Nomination

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Procuring Entity agrees in writing to indemnify the Contractor against and from the consequences of the matter:

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

5.3 Payments to nominated Subcontractors

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

5.4 Evidence of Payments

Before issuing a Payment Certificate which includes an amount payable to a nominated

Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- a) Submits this reasonable evidence to the Engineer, or
- b) i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
 - ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement, then the Procuring Entity may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in subparagraphs (a) or (b) above. The Contractor shall then repay, to the Procuring Entity, the amount which the nominated Subcontractor was directly paid by the Procuring Entity.

6 STAFF AND LABOR

61 Engagement of Staff and Labor

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

62 Rates of Wages and Conditions of Labor

- 621 The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by Procuring Entity's whose trade or industry is similar to that of the Contractor.
- 622 The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in Kenya in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of Kenya for the time being in force, and the Contractor shall perform such duties in regard to such deductions there of as may be imposed on him by such Laws.

63 Persons in the Service of Procuring Entity

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

64 Labor Laws

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

65 Working Hours

No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the SCC, unless:

- a) Otherwise stated in the Contract,
- b) The Engineer gives consent, or
- c) The work is unavoidable, or necessary for the protection of life or property or for the safety of

the Works, in which case the Contractor shall immediately advise the Engineer.

66 Facilities for Staff and Labor

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

67 Health and Safety

- 67.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Procuring Entity's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.
- 67.2 The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.
- 67.3 The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.
- 67.4 HIV-AIDS Prevention. The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

68 Contractor's Superintendence

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

69 Contractor's Personnel

- 69.1 The Contractor's Personnel specified in the SCC shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:
- a) Persists in any misconduct or lack of care,
 - b) Carries out duties incompetently or negligently,
 - c) Fails to conform with any provisions of the Contract,
 - d) Persists in any conduct which is prejudicial to safety, health, or the protection of the environment,
- or

- e) Based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works.

6.9.2 If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and Equipment

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

6.11 Disorderly Conduct

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

6.12 Foreign Personnel

6.12.1 The Contractor may bring in to the Country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Procuring Entity will, if requested by the Contractor, use his Lowest endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national or government permission required for bringing in the Contractor's personnel.

6.12.2 The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

6.13 Supply of Foodstuffs

6.13.1 The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.

6.14 Supply of Water

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

6.15 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

6.16 Alcoholic Liquor or Drugs

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

6.17 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

618 Festivals and Religious Customs

The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.

619 Funeral Arrangements

The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.

620 Prohibition of Forced or Compulsory Labor

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

621 Prohibition of Harmful Child Labor

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

622 Employment Records of Workers

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

623 Workers' Organizations

The Contractor shall comply with laws on workers' rights to form and to join workers' organizations without interference and to bargain collectively.

624 Non-Discrimination and Equal Opportunity

The Contractor shall not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment relationship on the principle of equal opportunity and fair treatment and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline.

7. Plant, Materials and Workmanship

7.1 Manner of Execution

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

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

72 Samples

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

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

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

73 Inspection

73.1 The Procuring Entity's Personnel shall at all reasonable times:

- a) Have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- b) During production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

73.2 The Contractor shall give the Procuring Entity's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Engineer whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

74 Testing

74.1 This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

74.2 Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Engineer may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

74.3 The Engineer shall give the Contractor not less than 24 hours' notice of the Engineer's intention to attend the tests. If the Engineer does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Engineer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Procuring Entity is responsible, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) Payment of any such Cost-plus profit, which shall be included in the Contract Price.

74.4 After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Engineer has not attended the tests, he shall be deemed to have accepted the readings as accurate.

75 Rejection

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

76 Remedial Work

- 76.1 Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:
- a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
 - b) remove and re-execute any other work which is not in accordance with the Contract, and
 - c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.
- 76.2 The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).
- 76.3 If the Contractor fails to comply with the instruction, the Procuring Entity shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity all costs arising from this failure.

77 Ownership of Plant and Materials

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

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

78 Royalties

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

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

8 COMMENCEMENT, DELAYS AND SUSPENSION

8.1 Commencement of Works

- 8.1.1 Except as otherwise specified in the Special Conditions of Contract, the Commencement Date shall be the date at which the following precedent conditions have all been fulfilled and the Engineer's notification recording the agreement of both Parties on such fulfilment and instructing to commence the Work is received by the Contractor:
- Contract by relevant authorities of the Country;
 - delivery to the Contractor of reasonable evidence of the Procuring Entity's financial arrangements (under Sub-Clause 2.4 [Procuring Entity's Financial Arrangements]);
 - signature of the Contract Agreement by both Parties, and if required, approval of the except if otherwise specified in the **SCC**, effective access to and possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works
 - receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding Procuring Entity guarantee has been delivered by the Contractor.
- 8.1.2 If the said Engineer's instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 16.2 [Termination by Contractor].
- 8.1.3 The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date and shall then proceed with the Works with due expedition and without delay.

82 Time for Completion

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

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

83 Programme

- 83.1 The Contractor shall submit a detailed time programme to the Engineer within 14 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:
- the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
 - each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
 - the sequence and timing of inspections and tests specified in the Contract, and
 - a supporting report which includes:
 - a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
 - details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.
- 83.2 Unless the Engineer, within 14 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Procuring Entity's Personnel shall be entitled to rely upon the programme when planning their activities.

833 The Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

834 If, at anytime, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer in accordance with this Sub-Clause.

84 Extension of Time for Completion

84.1 The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:

- a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,
- b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
- c) exceptionally adverse climatic conditions,
- d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- e) Any delay, impediment or prevention caused by or attributable to the Procuring Entity, the Procuring Entity's Personnel, or the Procuring Entity's other contractors.

84.2 If the Contractor considers itself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

85 Delays Caused by Authorities

If the following conditions apply, namely:

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

86 Rate of Progress

86.1 If, at any time:

- a) Actual progress is too slow to complete within the Time for Completion, and/or
- b) Progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme], other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Engineer may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Engineer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Procuring Entity to incur additional costs, the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity, in addition to delay damages

(if any) under Sub-Clause 8.7 below.

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

8.7 Delay Damages

- 8.7.1 If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay delay damages to the Procuring Entity for this default. These delay damages shall be the sum stated in the SCC, which shall be paid for everyday which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the SCC.

- 8.7.2 These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

8.8 Suspension of Work

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

8.9 Consequences of Suspension

- 8.9.1 If the Contractor suffers delay and/or incurs Cost from complying with the Engineer's instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - Payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

- 8.9.2 The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

8.10 Payment for Plant and Materials in Event of Suspension

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

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

8.11 Prolonged Suspension

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

8.12 Resumption of Work

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

9. TESTS ON COMPLETION**9.1 Contractor's Obligations**

9.1.1 The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].

9.1.2 The Contractor shall give to the Engineer not less than 21 days' notice of the date after which the Contract or will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Engineer shall instruct.

9.1.3 In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by the Procuring Entity on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Engineer.

9.2 Delayed Tests

9.2.1 If the Tests on Completion are being unduly delayed by the Procuring Entity, Sub-Clause 7.4 [Testing] (fifth paragraph) and/or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Engineer may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contract or may fix and of which he shall give notice to the Engineer.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Procuring Entity's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contract or and the results of the Tests shall be accepted as accurate.

9.3 Retesting

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

9.4 Failure to Pass Tests on Completion

- 94.1 If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Engineer shall be entitled to:
- a) Order further repetition of Tests on Completion under Sub-Clause 9.3;
 - b) If the failure deprives the Procuring Entity of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Procuring Entity shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [Failure to Remedy Defects]; or
 - c) Issue a Taking-Over Certificate, if the Procuring Entity so requests.
- 94.2 In the event of sub-paragraph (c), the Contractor shall proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Procuring Entity as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Procuring Entity may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations].

10. PROCURING ENTITY'S TAKING OVER

10.1 Taking Over of the Works and Sections

- 10.1.1 Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Procuring Entity when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.
- 10.1.2 The Contractor may apply by notice to the Engineer for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.
- 10.1.3 The Engineer shall, within 30 days after receiving the Contractor's application:
- a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
 - b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.
- 10.1.4 If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 30 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

- 10.2.1 The Engineer may, at the sole discretion of the Procuring Entity, issue a Taking-Over Certificate for any part of the Permanent Works.

The Procuring Entity shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Procuring Entity does use any part of the Works before the Taking-Over Certificate is issued:

- a) The part which is used shall be deemed to have been taken over as from the date on which it is used,
- b) The Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Procuring Entity, and
- c) If requested by the Contractor, the Engineer shall issue a Taking-Over Certificate for this part.

- 1022 After the Engineer has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.
- 1023 If the Contractor incurs Cost as a result of the Procuring Entity taking over and/or using a part of the Works, other than such use as is specified in the Contractor agreed by the Contractor, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost-plus profit, which shall be included in the Contract Price. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost and profit.
- 1024 If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages there after for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages] and shall not affect the maximum amount of these damages.

103 Interference with Tests on Completion

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

The Engineer shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Engineer shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

- 1032 If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) Payment of any such Cost-plus profit, which shall be included in the Contract Price.

- 1033 After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

104 Surfaces Requiring Reinstatement

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

11. Defects Liability

11.1 Completion of Outstanding Work and Remedying Defects

- 11.1.1 In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable there after, the Contractor shall:

- a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
- b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Procuring Entity on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

11.12 If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Procuring Entity.

11.2 Cost of Remedying Defects

11.2.1 All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

- a) Any design for which the Contractor is responsible,
- b) Plant, Materials or workmanship not being in accordance with the Contract, or
- c) Failure by the Contractor to comply with any other obligation.

11.2.2 If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Procuring Entity, and Sub-Clause 13.3 [Variation Procedure] shall apply.

11.3 Extension of Defects Notification Period

11.3.1 The Procuring Entity shall be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or by reason of damage attributable to the Contractor. However, a Defects Notification Period shall not be extended by more than two years.

11.3.2 If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.

11.4 Failure to Remedy Defects

11.4.1 If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Procuring Entity, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

11.4.2 If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Procuring Entity may (at his option):

- a) Carry out the work itself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity the costs reasonably incurred by the Procuring Entity in remedying the defect or damage;
- b) Require the Engineer to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or
- c) If the defect or damage deprives the Procuring Entity of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use.

11.4.3 Without prejudice to any other rights, under the Contract otherwise, the Procuring Entity shall then

be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5 Removal of Defective Work

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

11.6 Further Tests

- 11.6.1 If the work of remedying of any defect or damage may affect the performance of the Works, the Engineer may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 30 days after the defect or damage is remedied.
- 11.6.2 These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

11.7 Right of Access

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

11.8 Contractor to Search

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

11.9 Completion Certificate

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

11.10 Unfulfilled Obligations

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

11.11 Clearance of Site

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

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Procuring Entity's costs, the Contractor shall pay the outstanding balance to the Procuring Entity.

12 MEASUREMENT AND EVALUATION

12.1 Works to be Measured

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

12.2 Method of Measurement

Except as otherwise stated in the Contract and notwithstanding local practice:

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

12.3 Evaluation

- 12.3.1 Except as otherwise stated in the Contract, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the Contract Price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contractor, if there is no such item, specified for similar work.

- 1232 Any item of work included in the Bills of Quantities for which no rate or price was specified shall be considered as included in other rates and prices in the Bills of Quantities and will not be paid for separately.

However, a new rate or price shall be appropriate for an item of work if:

- a) I) the measured quantity of the item is changed by more than 25% from the quantity of this item in the Bills of Quantities or another Schedule,
- ii) This change in quantity multiplied by such specified rate for this item exceeds 0.25% of the Accepted Contract Amount,
- iii) This change in quantity directly changes the Cost per unit quantity of this item by more than 1%, and
- iv) This item is not specified in the Contract as a “fixed rate item”; or
- b) i) the work is instructed under Clause 13 [Variations and Adjustments],
- ii) no rate or price is specified in the Contract for this item, and
- iii) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.

- 1233 Each new rate or price shall be derived from any relevant rates or prices in the Contract, with reasonable adjustments to take account of the matters described in sub-paragraph (a) and/or (b), as applicable. If no rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable Cost of executing the work, together with profit, taking account of any other relevant matters.

- 1234 Until such time as an appropriate rate or price is agreed or determined, the Engineer shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned work commences.

- 1235 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (*which would be the tender price*), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: (*corrected tender price – tender price*)/*tender price* X 100.

124 Omissions

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

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

13 VARIATIONS AND ADJUSTMENTS

131 Right to Vary

- 13.1.1 Variations may be initiated by the Engineer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal.
- 13.1.2 The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction.
Each Variation may include:
- a) Changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
 - b) Changes to the quality and other characteristics of any item of work,
 - c) Changes to the levels, positions and/or dimensions of any part of the Works,
 - d) Omission of any work unless it is to be carried out by others,
 - e) Any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
 - f) Changes to the sequence or timing of the execution of the Works.
- 13.1.3 The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Engineer instructs or approves a Variation.

13.2 Value Engineering

- 13.2.1 The Contractor may, at any time, submit to the Engineer a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Procuring Entity of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Procuring Entity of the completed Works, or (iv) otherwise be of benefit to the Procuring Entity.
- 13.2.2 The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub- Clause 13.3 [Variation Procedure].

If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

- a) The Contractor shall design this part,
 - b) Sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and
 - c) If this change results in a reduction in the contract value of this part, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall be half (50%) of the difference between the following amounts:
 - i) such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost], and
 - ii) the reduction (if any) in the value to the Procuring Entity of the varied works, taking account of any reductions in quality, anticipated life or operational efficiencies.
- 13.2.3 However, if amount (i) is less than amount (ii), there shall not be a fee.

13.3 Variation Procedure

- 13.3.1 If the Engineer requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:
- a) a description of the proposed work to be performed and a programme for its execution,
 - b) the Contractor's proposal for any necessary modifications to the programme according to Sub-

Clause 8.3 [Programme] and to the Time for Completion, and

c) the Contractor's proposal for evaluation of the Variation.

1332 The Engineer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

1333 Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Engineer to the Contractor, who shall acknowledge receipt.

Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Engineer instructs or approves otherwise in accordance with this Clause.

134 Payment in Applicable Currencies

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

135 Provisional Sums

135.1 Each Provisional Sum shall only be used, in whole or in part, in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct:

- a) Work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or
- b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which there shall be included in the Contract Price:
 - i) The actual amounts paid (or due to be paid) by the Contractor, and
 - ii) A sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule.
 - iii) If there is no such rate, the percentage rate stated in the **SCC** shall be applied.

1352 The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

136 Daywork

136.1 For work of a minor or incidental nature, the Engineer may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clauses shall not apply.

Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

136.2 Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Engineer accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- a) The names, occupations and time of Contractor's Personnel,
- b) The identification, type and time of Contractor's Equipment and Temporary Works, and
- c) The quantities and types of Plant and Materials used.

13.63 One copy of each statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

13.7 Adjustments for Changes in Legislation

13.7.1 The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

13.7.2 If the Contract or suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) Payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

13.7.3 Notwithstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the index ing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8 [Adjustments for Changes in Cost].

13.8 Adjustments for Changes in Cost

13.8.1 In this Sub-Clause, "table of adjustment data" means the completed table of adjustment data for local and foreign currencies included in the Schedules. If there is no such table of adjustment data, this Sub- Clause shall not apply.

13.8.2 If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labor, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in costs.

13.8.3 The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:

$P_n = a + b L_n / L_o + c E_n / E_o + d M_n / M_o + \dots$ where:

“ P_n ” is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period “ n ”, this period being a month unless otherwise stated in the SCC;

“ a ” is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

“ b ”, “ c ”, “ d ”, ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labor, equipment and materials;

“ L_n ”, “ E_n ”, “ M_n ”, ... are the current cost indices or reference prices for period “ n ”, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

“ L_o ”, “ E_o ”, “ M_o ” ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.

- 1384 The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Engineer. For this purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.
- 1385 In cases where the “currency of index” is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central Procuring Entity of the Country, of this relevant currency on the above date for which the index is required to be applicable.
- 1386 Until such time as each current cost index is available, the Engineer shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.
- 1387 If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price, which ever is more favorable to the Procuring Entity.
- 1388 The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.

14 CONTRACT PRICE AND PAYMENT

14.1 The Contract Price

14.1.1 Unless otherwise stated in the Particular Conditions:

- a) the Contract Price shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;
- b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];
- c) any quantities which may be set out in the Bills of Materials or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
 - i) of the Works which the Contractor is required to execute, or
 - ii) for the purposes of Clause 12 [Measurement and Evaluation]; and
- d) the Contractor shall submit to the Engineer, within 30 days after the Commencement Date, a proposed breakdown of each lumpsum price in the Schedules.

- 14.12 The Engineer may take account of the breakdown when preparing Payment Certificates, but shall not be bound by it.
- 14.13 Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts there for, imported by the Contractor for the sole purpose of executing the Contract shall be exempt from the payment of import duties and taxes upon importation.

14.2 Advance Payment

- 14.2.1 The Procuring Entity shall make an advance payment, as an interest- free loan for mobilization and cashflow support, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the **SCC**. Unless and until the Procuring Entity receives this guarantee, or if the total advance payment is not stated in the **SCC**, this Sub-Clause shall not apply.
- 14.2.2 The Engineer shall deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Procuring Entity receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by a reputable Procuring Entity or financial institution selected by the Contractor and shall be in the form annexed to the Particular Conditions or in another form approved by the Procuring Entity.
- 14.2.3 The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.
- 14.2.4 Unless stated otherwise in the **SCC**, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Engineer in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:
- a) Deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 percent (30%) of the Accepted Contract Amount less Provisional Sums; and
 - b) Deductions shall be made at the amortization rate stated in the **SCC** of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 percent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.
- 14.2.5 If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Procuring Entity], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Procuring Entity], except for Sub-Clause 15.5 [Procuring Entity's Entitlement to Termination for Convenience], payable by the Contractor to the Procuring Entity.

14.3 Application for Interim Payment Certificates

- 14.3.1 The Contractor shall submit a Statement in six copies to the Engineer after the end of each month, in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers itself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with Sub-Clause 4.21 [Progress Reports].

- 1432 The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:
- a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);
 - b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];
 - c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the **SCC** to the total of the above amounts, until the amount so retained by the Procuring Entity reaches the limit of Retention Money (if any) stated in the **SCC**;
 - d) any amounts to be added for the advance payment and (if more than one instalment) and to be deducted for its repayments in accordance with Sub-Clause 14.2 [Advance Payment];
 - e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];
 - f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and
 - g) the deduction of amounts certified in all previous Payment Certificates.
- 1433 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (*which would be the tender price*), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: *(corrected tender price – tender price) / tender price X 100*.

144 Schedule of Payments

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

145 Plant and Materials intended for the Works (*see SCC for lists*)

- 145.1 If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].
- 145.2 If the lists referred to in sub-paragraphs (b) (i) or (c) (i) below are not included in the Schedules, this Sub-Clause shall not apply. The Engineer shall determine and certify each addition if the

following conditions are satisfied:

- a) The Contractor has:
 - i) Kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
 - ii) Submitted a statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence; and either:
- b) The relevant Plant and Materials:
 - i) Are those listed in the Schedules for payment when shipped,
 - ii) Have been shipped to the Country, enroute to the Site, in accordance with the Contract; and
 - iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Engineer together with evidence of payment of freight and insurance, any other documents reasonably required, and an Procuring Entity guarantee in a form and issued by an entity approved by the Procuring Entity in amounts and currencies equal to the amount due under this Sub- Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2[Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration;
- c) the relevant Plant and Materials:
 - i) are those listed in the Schedules for payment when delivered to the Site, and
 - ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

1453 The additional amount to be certified shall be the equivalent of eighty percent (80%) of the Engineer's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.

1454 The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

146 Issue of Interim Payment Certificates

146.1 No amount will be certified or paid until the Procuring Entity has received and approved the Performance Security. Thereafter, the Engineer shall, within 30 days after receiving a Statement and supporting documents, deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate which shall state the amount which the Engineer fairly determines to be due, with all supporting particulars for any reduction or withholding made

However, prior to issuing the Taking-Over Certificate for the Works, the Engineer shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the SCC. In this event, the Engineer shall give notice to the Contractor accordingly.

146.2 An Interim Payment Certificate shall not be withheld for any other reason, although:

- a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

- 14.63 The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer's acceptance, approval, consent or satisfaction.

14.7 Payment

- 14.7.1 The Procuring Entity shall pay to the Contractor:

- a) The first instalment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and Sub-Clause 14.2 [Advance Payment], whichever is later;
- b) the amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents; or, at a time when the Procuring Entity's loan or credit (from which part of the payments to the Contractor is being made) is suspended, the amount shown on any statement submitted by the Contractor within 14 days after such statement is submitted, any discrepancy being rectified in the next payment to the Contractor; and
- c) the amount certified in the Final Payment Certificate within 56 days after the Procuring Entity receives this Payment Certificate; or, at a time when the Procuring Entity's loan or credit (from which part of the payments to the Contractor is being made) is suspended, the undisputed amount shown in the Final Statement within 56 days after the date of notification of the suspension in accordance with Sub-Clause 16.2 [Termination by Contractor].

- 14.7.2 Payment of the amount due in each currency shall be made in to the Procuring Entity account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.

14.8 Delayed Payment

- 14.8.1 If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.

- 14.8.2 Unless otherwise stated in the Particular Conditions, these financing charges shall be calculated at the annual rate of three percentage points above the discount rate of the central Procuring Entity in the country of the currency of payment, or if not available, the inter-Procuring Entity offered rate, and shall be paid in such currency.

The Contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy.

14.9 Payment of Retention Money

- 14.9.1 When the Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.

- 14.9.2 Promptly after the latest of the expiry dates of the Defects Notification Periods, the outstanding balance of the Retention Money shall be certified by the Engineer for payment to the Contractor. If a Taking-Over Certificate was issued for a Section, a proportion of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.

- 14.9.3 However, if any work remains to be executed under Clause 11 [Defects Liability], the Engineer shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

- 1494 When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost].
- 1495 Unless otherwise stated in the Particular Conditions, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form annexed to the Particular Conditions or in another form approved by the Procuring Entity and issued by a reputable Procuring Entity or financial institution selected by the Contractor, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contract or has executed and completed the Works and remedied any defects, as specified for the Performance Security in Sub-Clause 4.2. On receipt by the Procuring Entity of the required guarantee, the Engineer shall certify and the Procuring Entity shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release under the second paragraph of this Sub-Clause. The Procuring Entity shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate.
- 1496 If the Performance Security required under Sub-Clause 4.2 is in the form of a demand guarantee, and the amount guaranteed under it when the Taking-Over Certificate is issued is more than half of the Retention Money, then the Retention Money guarantee will not be required. If the amount guaranteed under the Performance Security when the Taking-Over Certificate is issued is less than half of the Retention Money, the Retention Money guarantee will only be required for the difference between half of the Retention Money and the amount guaranteed under the Performance Security.

14.10 Statement at Completion

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

14.3 [Application for Interim Payment Certificates], showing:

- a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
- b) any further sums which the Contractor considers to be due, and
- c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The Engineer shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

14.11 Application for Final Payment Certificate

- 14.11.1 Within 56 days after receiving the Performance Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Engineer:
- a) The value of all work done in accordance with the Contract, and
 - b) Any further sums which the Contractor considers to be due to him under the Contractor otherwise.
- 14.11.2 If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require within 30 days from receipt of said draft and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".
- 14.11.3 However, if, following discussions between the Engineer and the Contractor and any changes to

the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Procuring Entity (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Procuring Entity (with a copy to the Engineer) a Final Statement.

14.12 Discharge

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

14.13 Issue of Final Payment Certificate

14.13.1 Within 30 days after receiving the Final Statement and discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Engineer shall deliver, to the Procuring Entity and to the Contractor, the Final Payment Certificate which shall state:

- (a) The amount which he fairly determines is finally due, and
- (b) After giving credit to the Procuring Entity for all amounts previously paid by the Procuring Entity and for all sums to which the Procuring Entity is entitled, the balance (if any) due from the Procuring Entity to the Contractor or from the Contractor to the Procuring Entity, as the case may be.

14.13.1 If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Engineer shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 30 days, the Engineer shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

14.14 Cessation of Procuring Entity's Liability

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

- a) In the Final Statement and also
- b) (Except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].

14.14.2 However, this Sub-Clause shall not limit the Procuring Entity's liability under his indemnification obligations, or the Procuring Entity's liability in any case of fraud, deliberate default or reckless misconduct by the Procuring Entity.

14.15 Currencies of Payment

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

- a) If the Accepted Contract Amount was expressed in Local Currency only:
 - (i) The proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties;
 - ii) payments and deductions under Sub-Clause 13.5 [Provisional Sums] and Sub-Clause 13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and

- proportions; and
- iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a) (i) above;
- b) payment of the damages specified in the **SCC**, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies;
- c) other payments to the Procuring Entity by the Contractor shall be made in the currency in which the sum was expended by the Procuring Entity, or in such currency as may be agreed by both Parties;
- d) if any amount payable by the Contractor to the Procuring Entity in a particular currency exceeds the sum payable by the Procuring Entity to the Contractor in that currency, the Procuring Entity may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
- e) if no rates of exchange are stated in the Schedule of Payment Currencies, they shall be those prevailing on the Base Date and determined by the central Procuring Entity of the Country.

15. TERMINATION BY PROCURING ENTITY

15.1 Notice to Correct

If the Contractor fails to carry out any obligation under the Contract, the Engineer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

15.2 Termination by Procuring Entity

- 15.2.1 The Procuring Entity shall be entitled to terminate the Contract if the Contractor:
- a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],
 - b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
 - c) without reasonable excuse fails:
 - (i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
 - ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 30 days after receiving it,
 - d) subcontracts the whole of the Works or as signs the Contract without the required agreement,
 - e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
 - f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
 - i) for doing or forbearing to do any action in relation to the Contract, or
 - ii) for showing or for bearing to show favor or disfavor to any person in relation to the Contract, or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination, or
 - g) based on reasonable evidence, has engaged in Fraud and Corruption as defined in paragraph 2.2 of the Appendix B to these General Conditions, in competing for or in executing the Contract.
- 15.2.2 In any of these events or circumstances, the Procuring Entity may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f) or (g), the Procuring Entity may by notice terminate the Contract

immediately.

- 1523 The Procuring Entity's election to terminate the Contract shall not prejudice any other rights of the Procuring Entity, under the Contract or otherwise.

The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his lowest efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Procuring Entity may complete the Works and/or arrange for any other entities to do so. The Procuring Entity and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.

The Procuring Entity shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Procuring Entity, these items may be sold by the Procuring Entity in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

153 Valuation at Date of Termination

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

154 Payment after Termination

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

- a) Proceed in accordance with Sub-Clause 2.5 [Procuring Entity's Claims],
- b) Withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Procuring Entity, have been established, and/or
- c) Recover from the Contractor any losses and damages incurred by the Procuring Entity and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, the Procuring Entity shall pay any balance to the Contractor.

155 Procuring Entity's Entitlement to Termination for Convenience

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

- 155.2 After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 16.4 [Payment on Termination].

156 Fraud and Corruption

The Procuring Entity requires compliance with the national law and regulations against corruption. All available sanctions will apply where corruption is detected.

16. SUSPENSION AND TERMINATION BY CONTRACTOR

16.1 Contractor's Entitlement to Suspend Work

- 16.1.1 If the Engineer fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or the Procuring Entity fails to comply with Sub-Clause 2.4 [Procuring Entity's Financial Arrangements] or Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 21 days' notice to the Procuring Entity, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.
- 16.1.2 Notwithstanding the above, if the Procuring Entity has suspended disbursements under the loan or credit from which payments to the Contractor are being made, in whole or in part, for the execution of the Works, and no alternative funds are available as provided for in Sub-Clause 2.4 [Procuring Entity's Financial Arrangements], the Contractor may by notice suspend work or reduce the rate of work at any time, but not less than 7 days after the Procuring Entity having received the suspension notification from the Procuring Entity.
- 16.1.3 The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].
- 16.1.4 If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.
- 16.1.5 If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- 16.1.6 After receiving this notice, the Engineers shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

16.2 Termination by Contractor

- 16.2.1 The Contractor shall be entitled to terminate the Contract if:
- a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work] in respect of a failure to comply with Sub-Clause 2.4 [Procuring Entity's Financial Arrangements],
 - b) the Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
 - c) the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Procuring Entity's Claims]),
 - d) the Procuring Entity substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
 - e) the Procuring Entity fails to comply with Sub-Clause 1.6 [Contract Agreement] or Sub-Clause 1.7 [Assignment],
 - f) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11

[Prolonged Suspension], or

- g) the Procuring Entity becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
- h) The Contractor does not receive the Engineer's instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works].

1622 In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Procuring Entity, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

1623 In the event the Procuring Entity suspends the loan or credit from which part or whole of the payments to the Contractor are being made, if the Contractor has not received the sums due to him upon expiration of the 14 days referred to in Sub-Clause 14.7 [Payment] for payments under Interim Payment Certificates, the Contractor may, without prejudice to the Contractor's entitlement to financing charges under Sub-Clause 14.8 [Delayed Payment], take one of the following actions, namely (i) suspend work or reduce the rate of work under Sub-Clause 16.1 above, or (ii) terminate the Contract by giving notice to the Procuring Entity, with a copy to the Engineer, such termination to take effect 14 days after the giving of the notice.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

163 Cessation of Work and Removal of Contractor's Equipment

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

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

164 Payment on Termination

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

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

17. RISK AND RESPONSIBILITY

17.1 Indemnities

17.1.1 The Contractor shall indemnify and hold harmless the Procuring Entity, the Procuring Entity's Personnel, and their respective agents, against and from all claims, damages, losses and expenses

(including legal fees and expenses) in respect of:

- (a) Bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, willful actor breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of the irrespective agents, and
- (b) Damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, the irrespective agents, or any one directly or indirectly employed by any of them.

17.12 The Procuring Entity shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].

17.2 Contractor's Care of the Works

17.2.1 The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Procuring Entity. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Procuring Entity.

17.2.2 After responsibility has accordingly passed to the Procuring Entity, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

17.2.3 If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

17.2.4 The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3 Procuring Entity's Risks

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

- a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country,
- c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel,
- d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,

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

174 Consequences of Procuring Entity's Risks

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

175 Intellectual and Industrial Property Rights

- 175.1 In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, tradename, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.
- 175.2 Whenever a Party does not give notice to the other Party of any claim within 30 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.
- 175.3 The Procuring Entity shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:
- a) An unavoidable result of the Contractor's compliance with the Contract, or
 - b) A result of any Works being used by the Procuring Entity:
 - i) For a purpose other than that indicated by, or reasonably to be inferred from, the
 - ii) Contract, or
 - iii) In conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.
- 175.4 The Contractor shall indemnify and hold the Procuring Entity harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.
- 175.5 If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might

be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

17.6 Limitation of Liability

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

17.7 Use of Procuring Entity's Accommodation/Facilities

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

18. INSURANCE

18.1 General Requirements for Insurances

- 18.1.1 In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.
- 18.1.2 Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Procuring Entity. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.1.3 Wherever the Procuring Entity is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.1.4 If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Procuring Entity shall act for Procuring Entity's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii)

the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

- 18.1.5 Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.
- 18.1.6 The relevant insuring Party shall, within the respective periods stated in the SCC (calculated from the Commencement Date), submit to the other Party:
- Evidence that the insurances described in this Clause have been effected, and
 - Copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].
- 18.1.7 When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Engineer.
- 18.1.8 Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.
- Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.
- 18.1.9 The insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract or fails to provide satisfactory evidence and copies of policies in accordance with this Sub- Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.
- 18.1.10 Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Procuring Entity, under the other terms of the Contract otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Procuring Entity in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.
- 18.1.11 Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Procuring Entity's Claims] or Sub- Clause 20.1[Contractor's Claims], as applicable.
- 18.1.12 The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

18.2 Insurance for Works and Contractor's Equipment

- 18.2.1 The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.
- 18.2.2 The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause

occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).

- 1823 The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.
- 1824 Unless otherwise stated in the Particular Conditions, insurances under this Sub-Clause:
- a) Shall be effected and maintained by the Contractor as insuring Party,
 - b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the costs of rectifying the loss or damage,
 - c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks],
 - d) shall also cover, to the extent specifically required in the tendering documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Procuring Entity of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Procuring Entity's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the SCC (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
 - e) may however exclude loss of, damage to, and reinstatement of:
 - i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,
 - iii) a part of the Works which has been taken over by the Procuring Entity, except to the extent that the Contractor is liable for the loss or damage, and
 - iv) Goods while they are not in the Country, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].
- 1825 If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Procuring Entity, with supporting particulars. The Procuring Entity shall then (i) be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

183 Insurance against Injury to Persons and Damage to Property

- 183.1 The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.
- 183.2 This insurance shall be for a limit per occurrence of not less than the amount stated in the SCC, with no limit on the number of occurrences. If an amount is not stated in the SCC, this Sub-Clause shall not apply. Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:

- a) Shall be effected and maintained by the Contractor as insuring Party,
- b) Shall be in the joint names of the Parties,
- c) Shall be extended to cover liability for all loss and damage to the Procuring Entity's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- d) May however exclude liability to the extent that it arises from:
 - i) The Procuring Entity's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
 - ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and
 - iii) a cause listed in Sub-Clause 17.3 [Procuring Entity's Risks], except to the extent that cover is available at commercially reasonable terms.

184 Insurance for Contractor's Personnel

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

19. FORCE MAJEURE

19.1 Definition of Force Majeure

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

19.2 Notice of Force Majeure

192.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

192.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

193 Duty to Minimize Delay

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

194 Consequences of Force Majeure

194.1 If the Contractor is prevented from performing his substantial obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause

20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in sub-paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment].

194.2 After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

195 Force Majeure Affecting Subcontractor

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

196 Optional Termination, Payment and Release

If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].

Upon such termination, the Engineer shall determine the value of the work done and issue a Payment Certificate which shall include:

- a) The amounts payable for any work carried out for which a price is stated in the Contract;

- b) The Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Procuring Entity when paid for by the Procuring Entity, and the Contractor shall place the same at the Procuring Entity's disposal;
- c) other Cost or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;
- d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and there turn of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
- e) the Cost of repatriation of the Contractor's staff and labor employed wholly in connection with the Works at the date of termination.

19.7 Release from Performance

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

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

20. CLAIMS, DISPUTES AND ARBITRATION

20.1 Contractor's Claims

- 20.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 20.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Procuring Entity shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clauses shall apply.
- 20.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.
- 20.1.3 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Procuring Entity's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.
- 20.1.4 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a

continuing effect:

- a) This fully detailed claim shall be considered as interim;
- b) The Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and
- c) The Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.

- 20.15 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.
- 20.16 Within the above defined period of 42 days, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.
- 20.17 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.
- 20.18 If the Engineer does not respond within the time frame defined in this Clause, either Party may consider that the claim is rejected by the Engineer and any of the Parties may refer to Arbitration in accordance with Sub-Clause 20.4 [Arbitration].
- 20.19 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of Sub-Clause 20.3 (f).

20.2 Amicable Settlement

Where a notice of a claim has been given, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, the Party giving a notice of a claim in accordance with Sub-Clause 20.1 above should move to commence arbitration after the fifty-sixth day from the day on which a notice of a claim was given, even if no attempt at an amicable settlement has been made.

20.3 Matters that may be referred to arbitration

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

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

and the Contract or agree otherwise in writing.

20.4 Arbitration

- 204.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 20.3 shall be finally settled by arbitration.
- 204.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
- 204.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 204.4 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.
- 204.5 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.
- 204.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Engineer from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
- 204.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.
- 204.7 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Engineer shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 204.8 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

205 Arbitration with National Contractors

- 205.1 If the Contract is with national contractors, arbitration proceedings will be conducted in accordance with the Arbitration Laws of Kenya. In case of any claim or dispute, such claim or dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed, on the request of the applying party, by the Chairman or Vice Chairman of any of the following professional institutions;
- i) Architectural Association of Kenya
 - ii) Institute of Quantity Surveyors of Kenya
 - iii) Association of Consulting Engineers of Kenya
 - iv) Chartered Institute of Arbitrators (Kenya Branch)
 - v) Institution of Engineers of Kenya

2052 The institution written to first by the aggrieved party shall take precedence over all other institutions.

206 Arbitration with Foreign Contractors

207.1 Arbitration with foreign contractors shall be conducted in accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL); or with proceedings administered by the International Chamber of Commerce (ICC) and conducted under the ICC Rules of Arbitration; by one or more arbitrators appointed in accordance with said arbitration rules.

207.2 The place of arbitration shall be a location specified in the **SCC**; and the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.4 [Law and Language].

207 Alternative Arbitration Proceedings

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

208 Failure to Comply with Arbitrator's Decision

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

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

10.7 Contract operations continue

Notwithstanding any reference to arbitration herein,

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

SECTION IX - SPECIAL CONDITIONS OF CONTRACT

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

Conditions	GCC Clause	Data
Procuring Entity's name and address	1	
Time for Completion	1	<u>1095</u> days
Engineer's name and address	1	Director (Development), Kenya National Highways Authority, Headquarters, Barabara Plaza, Jomo Kenyatta International Airport (JKIA), Nairobi, Off Mazao Road. Block A, 2nd Floor.
Electronic transmission	1.3	If so allowed the systems of electronic transmission shall be <u>N/A</u>
Time for the Parties entering into a Contract Agreement	1.6	Insert the date. DD/MM/YYYY
Time for access to the Site	2.1	No later than the Commencement Day, except for the following parts (if applicable, with detailed description of parts concerned: <u>28</u> days after Commencement Date
Engineer's Authority to make variations.	3.1.2 (b) (ii)	Variation would increase the Accepted Contract Amount by not exceeding--- 5 ---% of the contract Price.
		Variations resulting in an increase of the Accepted Contract Amount in excess of <u>5</u> % shall require approval of the Procuring Entity.
Performance Security	4.2.2	The Performance Security shall be in the amount of <u>10%</u> of the Contract Price and denominated in the currency <u>Kenya Shillings</u> .
		The performance security will be in the form of a "demand bank guarantee" in the amount(s) of <u>10%</u> of the Accepted Contract Amount in the same currency (ies) of the Contract Amount.
Contractor's Representative's name	4.3	<i>[insert the name of the Contractor's Representative agreed by the Procuring Entity prior to Contract signature]</i>
Working Hours	6.5	Normal working hours shall be <u>0008hrs</u> to <u>1700hrs</u> .
Key Personnel names	6.9.1	Director (Development), Kenya National Highways Authority, Barabara Plaza, Off Airport South Road, Opp. KCAA, P.O. Box 49712 - 00100 NAIROBI
Commencement of Works	8.1.1(c)	<u>28 days</u>

Conditions	GCC Clause	Data
Delay Damages	8.7.1	Delay damages shall be 0.025% of contract price per day of delay.
Maximum amount of delay damages	8.7.1	<u> 5 </u> % of the final Contract Price.
Defects Notification Period		-- 730 -- days.
Adjustments for Changes in Cost	13.8.3	Period “n” applicable to the adjustment multiplier “Pn”: <u> </u> not applicable <u> </u> [Insert the period if different from one (1) month; if period “n” is one (1) month, insert “not applicable”]
Delay damages for the Works	8.7 & 14.15(b)	0.025 % of the Contract Price per day. <i>If Sections are to be used, refer to Table: Summary of Sections below</i>
Provisional Sums	13.5. (b)(iii)	[If there are Provisional Sums, insert a percentage for adjustment of Provisional Sums] <u> NONE </u> %, otherwise insert “NONE”.
Total advance payment	14.2.1	<u> 10 </u> % Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable
Repayment amortization rate of advance payment	14.2.4(b)	<u> </u> %
Limit of Retention	14.3.2(c)	The limit of Retention Money (if any) shall be <u> 5% of Contract Price </u>
Percentage of Retention	14.3.2(c)	----- 5% of the Interim Certificate Payment <u> </u>
Plant and Materials	14.5.2(b)(i)	If Sub-Clause 14.5 applies: Plant and Materials for payment Free on Board <u> </u> [list].
	14.5.2(c)(i)	Plant and Materials for payment when delivered to the Site <u> </u> [list].
Minimum Amount of Interim Payment Certificates	14.6.1	KShs. 70,000,000.00
Publishing source of commercial interest rates for financial charges in case of delayed payment	14.8	Two percentage points above the discount rate given by the Central bank of Kenya.
Maximum total liability of the Contractor to the Procuring Entity	17.6.2	[Select one of the two options below as appropriate] The product of <u> </u> [insert a multiplier less or greater than one] times the Accepted Contract Amount, or <u> </u> [insert amount of the maximum total liability]
Periods for submission of insurance:	18.1.6	
a. evidence of insurance.		<u> 15 </u> days
b. relevant policies		<u> 15 </u> days

Conditions	GCC Clause	Data
Maximum number of deductibles for insurance of the Procuring Entity's risks	18.2(d)	<i>[Insert maximum amount of deductibles]</i>
Minimum amount of third-party insurance	18.3.2	0.3% of the Contract Price
The place of arbitration	20.7.2	The place of arbitration shall be ---NAIROBI--- The Chartered Institute of Arbitrators - Kenya.

Section X - Contract Forms

Table of Forms

FORM No. 1 - NOTIFICATION OF INTENTION TO AWARD

FORM NO. 2 – REQUEST FOR REVIEW

FORM No. 3-LETTER OF AWARD

FORM No. 4 - CONTRACT AGREEMENT

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

FORM No. 6- PERFORMANCE SECURITY [Option 2– Performance
Bond] FORM No. 7 - ADVANCE PAYMENT SECURITY

FORM No. 8 - RETENTION MONEY SECURITY

FORM NO. 9 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

Name:.....*[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephones: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*

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

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 www.ppoa.go.ke).

3 Standstill Period

- a) **DEADLINE:** The Standstill Period is due to end at midnight on [*insert date*] (local time).
- i) The Standstill Period lasts Seven (7) 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_____

FORM NO. 2 - REQUEST FOR REVIEW

FORM FOR REVIEW (r.203 (1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

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

BETWEEN

.....APPLICANT

AND

.....RESPONDENT (Procuring Entity)

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

REQUEST FOR REVIEW

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

1.

2.

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

1.

2.

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

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

SIGNED

Board Secretary

FORM NO. 3 - LETTER OF AWARD

[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 Contract for your

Authorized Signature:

Name and Title of

Signatory: Name of

Agency:

Attachment: Contract Agreement

FORM NO. 4 – 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. 5 - 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]*

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. Further more, 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.
4. This guarantee shall expire, no later than the Day of 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.
5. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months]* *[one year]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

[Name of Authorized Official, signature(s) and seals/stamps]

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

The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency (cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

²*Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. 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*

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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 - PERFORMANCE SECURITY OPTION 2– (Performance Bond)

[Note: Procuring Entities are advised to use Performance Security–Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bond holder to action]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ *[insert name and Address of Procuring*

Entity] **Date:** _____ *[Insert date of issue]*

PERFORMANCE BOND No.: _____

Guarantor: *[Insert name and address of place of issue, unless indicated in the letter head]*

1. By this Bond _____ as Principal (hereinafter called “the Contractor”) and _____] as Surety (hereinafter called “the Surety”), are held and firmly bound unto _____] as Obligee (hereinafter called “the Procuring Entity”) in the amount of _____ for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
- 2 WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the day of, 20_____, for _____ in accordance with the documents, plans, specifications, and amendments thereto, which to the extent here in provided for, are by reference made part hereof and are herein after referred to as the Contract.
- 3 NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations there under, the Surety may promptly remedy the default, or shall promptly:
 - 1) Complete the Contract in accordance with its terms and conditions; or
 - 2) Obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term “Balance of the Contract Price,” as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or
 - 3) Pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions upto a total not exceeding the amount of this Bond.
- 4 The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

- 5 Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named here in or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.
- 6 In testimony whereof, the Contractor has here unto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this day _____ of _____ 20_____.

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of

FORM NO. 7 - 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 _____, 20____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.

² Insert the expected expiration date of the Time for Completion. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Procuring

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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. 8 - RETENTION MONEY SECURITY
[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ *[Insert name and Address of Procuring Entity]* **Date:** _____ *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: _____
[Insert guarantee reference number]

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that _____ *[insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture]* (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 upto the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of *[insert the second half of the Retention Money]* is to be made against a Retention Money guarantee.
3. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[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.

¹The Guarantor shall insert an amount representing the amount of the second half of the Retention Money.

²Insert a date that is twenty-eight days after the expiry of retention period after the actual completion date of the contract. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an

extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the Tenderer by meeting one or more of the following conditions:

- Directly or indirectly holding 25% or more of the shares.*
- Directly or in directly holding 25% or more of the voting rights.*
- Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.*

Tender Reference No.: _____ [insert identification

no] Name of the Assignment: _____ [insert name of the assignment]

to: _____ [insert complete name of Procuring Entity]

In response to your notification of award dated _____ [insert date of notification of award] to furnish additional information on beneficial ownership: _____ [select one option as applicable and delete the options that are not applicable]

I) We here by provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer (Yes / No)
<i>[include full name (last, middle, first), nationality, country of residence]</i>			

OR

ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions: directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights. Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.*

OR

We declare that we are unable to identify any Beneficial Owner meeting one or more of the following

conditions. [If this option is selected, the Tenderer shall provide explanation on why it is unable to identify any Beneficial Owner]

Directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights.

Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer]”

Name of the Tenderer:[insert complete name of the Tenderer]_____*

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

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

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

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