



**DEPARTMENT OF AGRICULTURE**  
**EMBU COUNTY GOVERNMENT**

**Request for Bids**  
**(One-Envelope Bidding Process)**  
**Procurement of:**

**CONSTRUCTION OF ENA FRESH PRODUCE MARKET FOR ENHANCED MARKET PARTICIPATION AT KAGAARI SOUTH WARD, RUNYENJES SUB-COUNTY IN EMBU COUNTY**

**RFB No: *KE-EMBU COUNTY-493099-CW-RFB***

**PROJECT: NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT (NAVCDP)**

**EMPLOYER: CHIEF OFFICER, DEPARTMENT OF AGRICULTURE  
EMBU COUNTY GOVERNMENT.**

**COUNTRY: KENYA**

Issued on: 24<sup>th</sup> February, 2026

Submission Date: 24<sup>th</sup> March, 2026

Time: 11.00 Am

# Procurement Document

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## Specific Procurement Notice Template

### Request for Bids Small Works (One-Envelope Bidding Process)

**Country:** KENYA

**Name of Project:** NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT (NAVCDP)

**Contract Title:** CONSTRUCTION OF ENA FRESH PRODUCE MARKET FOR ENHANCED MARKET PARTICIPATION AT KAGAARI SOUTH WARD, RUNYENJES SUB-COUNTY IN EMBU COUNTY

**Loan No./Credit No./ Grant No.:** 7064-KE

**RFB Reference No.:** KE-EMBU COUNTY-493099-CW-RFB

1. The Government of Kenya (GoK) has received financing from the World Bank toward the cost of the National Agricultural Value Chain Development Project (NAVCDP), and intends to apply part of the proceeds toward payments under the contract for Construction Works Ena Fresh Produce Market for enhances market participation at Kagaari South Ward, Runyenjes sub-county in Embu County. For this contract, the Borrower shall process the payments using the Direct Payment disbursement method, as defined in the World Bank's Disbursement Guidelines for Investment Project Financing.
2. The **Department of Agriculture** now invites sealed Bids from eligible Bidders for Construction Works Ena Fresh Produce Market for enhances market participation at Kagaari South Ward, Runyenjes sub-county in Embu County that includes majorly substructure works, superstructure works and electrical installation works. The time for completion is **180** calendar days.
3. Bidding will be conducted through national competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers" First Published July 2016 and Revised Fourth Edition November 2020 ("Procurement Regulations") and is open to all Bidders as defined in the Procurement Regulations.
4. Interested eligible Bidders may obtain further information from the Embu County Government website [www.embu.go.ke](http://www.embu.go.ke) and inspect the Bidding document during office hours 0800 to 1700 hours East African Time (EAT) at the address given below (Clause 10).

5. The bidding document in English may be viewed, inspected and obtained free of charge by interested eligible Bidders from the Embu County Government website [www.embu.go.ke](http://www.embu.go.ke).
6. Eligible bids must be enclosed in a plain sealed envelope marked with contract title and RFB Reference No. and be deposited in the tender box located at procurement block in the Embu County Headquarters offices along Embu-Meru highway on or before **24th March, 2026 at 11:00 Am** and be addressed to the address below (Clause 10). Electronic Bidding will not be permitted. Late Bids will be rejected. Bids will be publicly opened in the presence of the Bidders designated representatives and anyone who chooses to attend at the procurement boardroom on **24<sup>th</sup> March, 2026 at 11:00 Am**.
7. Bidders with bulky bid documents which cannot be dropped or fit in the tender box are advised to register their bids with the Director-procurement at the procurement office.
8. All Bids must be accompanied by a Bid Security of Kes. 740,000 (Say Kenya shillings Seven hundred and forty Thousand Only).
9. Attention is drawn to the Procurement Regulations requiring the Borrower to disclose information on the successful bidder's beneficial ownership, as part of the Contract Award Notice, using the Beneficial Ownership Disclosure Form as included in the bidding document.
10. The address(es) referred to above is (are):

**Chief Officer**

**Department of Agriculture**

**Embu County Government**

**Physical Address 36-60100 Embu**

**Tel: +254706014014**

**E-mail: [navcdpembucounty@gmail.com](mailto:navcdpembucounty@gmail.com)**

**Attention:**

**The County Project Coordinator**

**National Agricultural Value Chain Development Project**

**(NAVCDP)**

# Section I - Instructions to Bidders

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# Section I - Instructions to Bidders

## A. General

### 1. Scope of Bid

1.1 **I n** connection with the Specific Procurement Notice - Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues this bidding document for the provision of Works as specified in Section VII, Works' Requirements. The name, identification and number of lots (contracts) of this RFB are specified in the BDS.

1.2 Throughout this bidding document:

- (a) the term **“in writing”** means communicated in written form (e.g. by mail, e-mail, and fax, including if specified **in the BDS**, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;
- (b) if the context so requires, **“singular”** means **“plural”** and vice versa;
- (c) **“Day”** means calendar day, unless otherwise specified as **“Business Day”**. A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays;
- (d) **“ES”** means environmental and social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH));
- (e) **“Sexual Exploitation and Abuse” “(SEA)”** means the following:
  - “Sexual Exploitation”** is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
  - “Sexual Abuse”** is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
- (f) **“Sexual Harassment” “(SH)”** is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor's Personnel with other Contractor's or Employer's Personnel;
- (g) **“Contractor's Personnel”** is as defined in Sub- Clause 1 (ii) of the General Conditions of Contract; and

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(h) “**Employer’s personnel**” is as defined in GCC Sub-Clause 1 (nn) of the General Conditions of Contract.

A non-exhaustive list of (i) behaviors which constitute SEA and (ii) behaviors which constitute SH is attached to the Code of Conduct form in Section IV.

- 2. Source of Funds**
- 2.1 The Borrower or Recipient (hereinafter called “Borrower”) specified **in the BDS** has received or has applied for financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called “the Bank”) in an amount specified **in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this bidding document is issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment, plant, or materials, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).
- 3. Fraud and Corruption**
- 3.1 The Bank requires compliance with the Bank’s Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG’s Sanctions Framework, as set forth in Section VI.
- 3.2 In further pursuance of this policy, bidders shall permit and shall cause their agents (where declared or not), subcontractors, sub consultants, service providers, suppliers, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.
- 4. Eligible Bidders**
- 4.1 A Bidder may be a firm that is a private entity, or a state-owned enterprise or institution, subject to ITB 4.6, or any combination of them 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 Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified **in the BDS**, there is no limit on the number of members in a JV.

- 4.2 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
  - (b) receives or has received any direct or indirect subsidy from another Bidder; or
  - (c) has the same legal representative as another Bidder; or
  - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
  - (e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or
  - (f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Project Manager for the Contract implementation;
  - (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm;
  - (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.

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- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a Subcontractor in other Bids. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member may participate as a subcontractor in more than one Bid.
- 4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder 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.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
- 4.6 Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Employer.
- 4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing or Proposal-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under

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Chapter VII of the Charter of the United Nations, the Borrower's country 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. When the Works are implemented across jurisdictional boundaries (and more than one country is a Borrower, and is involved in the procurement), then exclusion of a firm or individual on the basis of ITB 4.8 (a) above by any country may be applied to that procurement across other countries involved, if the Bank and the Borrowers involved in the procurement agree.

- 4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.10 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment;
- (a) relates to fraud or corruption, and
  - (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.

**5. Eligible  
Materials,  
Equipment and  
Services**

- 5.1 The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

**B. Contents of Bidding Document**

**6. Sections of  
Bidding  
Document**

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

**PART 1 Bidding Procedures**

- Section I - Instructions to Bidders (ITB)
- Section II - Bid Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

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**PART 2 Works' Requirements**

- Section VII - Works' Requirements

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

- Section VIII - General Conditions of Contract (GCC)
- Section IX - Particular Conditions of Contract (PCC)
- Section X - Contract Forms

- 6.2 The Specific Procurement Notice - Request for Bids (RFB) issued by the Employer is not part of this bidding document.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the bidding document, responses to requests for clarification, the minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information and documentation as is required by the bidding document.

**7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting**

- 7.1 A Bidder requiring any clarification of the bidding document shall contact the Employer in writing at the Employer's address specified **in the BDS** or raise its inquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified **in the BDS**. The Employer shall forward copies of its response to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified **in the BDS**, the Employer shall also promptly publish its response at the web page identified in the BDS. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 8 and ITB 22.2.
- 7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.4 If so specified **in the BDS**, the Bidder's designated representative is invited to attend a pre-Bid meeting and/or a Site of Works visit. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested, to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the bidding document in accordance with ITB 6.3 Any modification to the bidding document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-Bid meeting. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

**8. Amendment of Bidding Document**

- 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the bidding document by issuing addenda.
- 8.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Employer in accordance with ITB 6. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.

- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

### C. Preparation of Bids

- 9. Cost of Bidding** 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

- 10. Language of Bid** 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in the language specified **in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified **in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

- 11. Documents Comprising the Bid** 11.1 The Bid shall comprise the following:
- (a) **Letter of Bid** prepared in accordance with ITB 12;
  - (b) **Bill of Quantities or Activity Schedule**: completed in accordance with ITB 12 and ITB 14, as specified **in the BDS**;
  - (c) **Bid Security or Bid-Securing Declaration**, in accordance with ITB 19.1;
  - (d) **Alternative Bid**, if permissible, in accordance with ITB 13;
  - (e) **Authorization**: written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.3;
  - (f) Bidder's **Eligibility**: documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to Bid;
  - (g) **Qualifications**: documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
  - (h) **Conformity**: a technical proposal in accordance with ITB 16;
  - (i) any other document required **in the BDS**.

- 11.2 In addition to the requirements under ITB 11.1, Bids 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 bid shall be signed

by all members and submitted with the Bid, together with a copy of the proposed Agreement.

- 11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

**12. Letter of Bid and Schedules**

- 12.1 The Letter of Bid and Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested.

**13. Alternative Bids**

- 13.1 Unless otherwise specified **in the BDS**, alternative Bids shall not be considered.
- 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included **in the BDS** 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 ITB 13.4 below, Bidders wishing to offer **technical** alternatives to the requirements of the bidding document must first price the Employer's design as described in the bidding document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, 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 Bidder with the Most Advantageous Bid conforming to the basic technical requirements shall be considered by the Employer.
- 13.4 When specified **in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Works. Such parts will be identified **in the BDS** and described in Section VII, Works' Requirements. The method for their evaluation will be stipulated in Section III, Evaluation and Qualification Criteria.

**14. Bid Prices and Discounts**

- 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Activity **Schedule** or Bill of Quantities shall conform to the requirements specified below.
- 14.2 The Bidder shall submit a Bid for the whole of the Works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section IV. Bidding Forms. In case of admeasurement contracts, the Bidder 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 Bidder will not be paid for by the Employer

when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.

- 14.3 The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the Bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid in accordance with ITB 12.1.
- 14.5 Unless otherwise specified **in the BDS** and the Conditions of Contract, the **prices** quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section IV- Bidding Forms and the Employer may require the Bidder to justify its proposed indices and weightings.
- 14.6 If so specified in ITB 1.1, Bids are invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the Bids 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 28 days prior to the deadline for submission of Bids, shall be included in the rates and prices<sup>1</sup> and the total Bid price submitted by the Bidder.

## **15. Currencies of Bid and Payment**

- 15.1 The currency(ies) **of** the Bid and the currency(ies) of payments shall be the same and shall be as specified **in the BDS**.
- 15.2 Bidders may be required by the Employer to justify, to the Employer'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 are reasonable<sup>2</sup>, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

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<sup>1</sup> In lump sum contracts, delete "rates and prices and the."

<sup>2</sup> For lump sum contracts, delete "unit rates and prices and shown in the Schedule of Adjustment Data are reasonable" and replace with "Lump Sum."

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- 16. Documents Comprising the Technical Proposal**
- 16.1 The Bidder shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work's requirements and the completion time.
- 17. Documents Establishing the Eligibility and Qualifications of the Bidder**
- 17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the **Letter** of Bid, included in Section IV, Bidding Forms.
- 17.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
- 17.3 If a margin of preference applies as specified in accordance with ITB 33.1, domestic **Bidders**, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.
- 18. Period of Validity of Bids**
- 18.1 Bids shall remain valid until the date specified **in the BDS** or any extended **date** if amended by the Employer in accordance with ITB 8. A Bid that is not valid until the date specified **in the BDS**, or any extended date if amended by the Employer in accordance with ITB 8, shall be rejected by the Employer as nonresponsive.
- 18.2 In exceptional **circumstances**, prior to the date of expiration of the Bid validity, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 19, it shall also be extended for twenty-eight (28) days beyond the extended date for Bid validity. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.
- 18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the date of expiry of the Bid validity specified in accordance with ITB 18.1, the Contract price shall be determined as follows:

- (a) in the case of **fixed price** contracts, the Contract price shall be the Bid **price** adjusted by the factor specified **in the BDS**;
- (a) in the case of **adjustable** price contracts, no adjustment shall be made; or
- (b) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

## 19. Bid Security

19.1 The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration **or** a Bid Security as specified **in the BDS**, in original form and, in the case of a Bid Security, in the amount and currency specified **in the BDS**.

19.2 A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.

19.3 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:

- (a) an **unconditional** guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company);
- (b) an **irrevocable** letter of credit;
- (c) a **cashier's** or certified check; or
- (d) another **security** specified **in the BDS**,

from a reputable source from an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Employer's Country, the issuing non-bank financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable, unless the Employer has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original date of expiry of the Bid validity, or beyond any extended date if requested under ITB 18.2.

19.4 If a Bid Security or Bid Securing Declaration is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive

Bid Security or Bid-**Securing** Declaration shall be rejected by the Employer as non-responsive.

- 19.5 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the **Performance** Security and if required in the BDS, the Environmental and Social (ES) Performance Security pursuant to ITB 48.
- 19.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security, and if required in the BDS, the Environmental and Social (ES) Performance Security.
- 19.7 The Bid **Security** may be forfeited:
- (a) if a Bidder withdraws its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid, or any extension thereto provided by the Bidder; or
  - (b) if the successful Bidder fails to:
    - (i) sign the Contract in accordance with ITB 47; or
    - (ii) furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 48.
- 19.8 The Bid Security or the Bid-**Securing** Declaration of a JV shall be in the name of the JV that **submits** the Bid. If the JV has not been constituted into a legally enforceable JV, at the time of Bidding, the Bid Security or the Bid-**Securing** Declaration shall be in the names of all future members as named in the letter of intent mentioned in ITB 4.1 and ITB 11.2.
- 19.9 If a Bid Security is not required **in the BDS**, pursuant to ITB 19.1, and;
- (a) if a Bidder withdraws its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid or any extended date provided by the Bidder; or
  - (b) if the successful Bidder fails to:
    - (i) sign the Contract in accordance with ITB 47; or
    - (ii) furnish a Performance Security and if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with ITB 48,

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the Borrower may, if provided for **in the BDS**, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time stated **in the BDS**.

**20. Format and  
Signing of Bid**

- 20.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 11 and clearly mark it “ORIGINAL”. Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked “ALTERNATIVE”. In addition, the Bidder shall submit copies of the Bid in the number specified **in the BDS**, and clearly mark each of them “COPY.” In the event of any discrepancy between the original and the copies, the original shall prevail.
- 20.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids 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 Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of **the Bidder**. This authorization shall consist of a written confirmation as specified **in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.
- 20.4 In case the Bidder is a JV, the Bid 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 interlineations, **erasures**, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

**D. Submission and Opening of Bids**

**21. Sealing and  
Marking of Bids**

- 21.1 The Bidder shall deliver the Bid in a single, sealed envelope (one-envelope Bidding process). Within the single envelope the Bidder shall place the following separate, sealed envelopes:
  - (a) in an envelope marked “ORIGINAL”, all documents comprising the Bid, as described in ITB 11; and
  - (b) in an envelope marked “COPIES”, all required copies of the Bid; and
  - (c) if alternative Bids are permitted in accordance with ITB 13, and if relevant:

- (i) in an envelope marked “ORIGINAL - ALTERNATIVE BID”, the alternative Bid; and
- (ii) in the enveloped marked “COPIES – ALTERNATIVE BID” all required copies of the alternative Bid.

21.2 The inner and outer envelopes shall:

- (a) bear the name and address of the Bidder;
- (b) be addressed to the Employer in accordance with ITB 22.1;
- (c) bear the specific identification of this Bidding process specified in accordance with BDS 1.1; and
- (d) bear a warning not to open before the time and date for Bid opening.

21.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

**22. Deadline for Submission of Bids**

22.1 Bids must be received by the Employer at the address and no later than the date and time specified **in the BDS**. When so specified **in the BDS**, Bidders shall have the option of submitting their Bids **electronically**. Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified **in the BDS**.

22.2 The Employer may, at its discretion, extend the deadline for the **submission** of Bids by amending the bidding document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

**23. Late Bids**

23.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 22. Any Bid **received** by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

**24. Withdrawal, Substitution, and Modification of Bids**

24.1 A Bidder may withdraw, substitute, or modify its Bid 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 ITB 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:

- (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in

addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” “MODIFICATION”; and

- (b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.

24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned **unopened** to the Bidders.

24.3 No Bid may be withdrawn, substituted, or modified in the interval between **the** deadline for submission of Bids and the date of expiry of the Bid validity specified by the Bidder on the Letter of Bid or any extended date thereof.

## 25. Bid Opening

25.1 Except in the cases specified in ITB 23 and ITB 24.2, the Employer shall publicly open and read out in accordance with this ITB, all Bids received by the deadline, at the date, time and place specified **in the BDS**, in the **presence** of Bidders’ designated representatives and anyone who chooses to attend. All Bidders, or their representatives and any interested party may attend a public opening. Any specific electronic Bid opening procedures required if electronic bidding is permitted in accordance with ITB 22.1, shall be as specified **in the BDS**.

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

25.3 Next, envelopes marked “SUBSTITUTION” shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.

25.4 Next, envelopes marked “MODIFICATION” shall be opened and read out with the **corresponding** Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening.

25.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Price, per lot (contract) if applicable, including any discounts and alternative Bids; the presence or absence of a Bid

Security, or Bid Securing Declaration, if required; and any other details as the Employer may consider appropriate.

- 25.6 Only Bids, alternative Bids and discounts that are opened and read out at Bid **opening** shall be considered further for evaluation. The Letter of Bid and the priced Schedules are to be initialed by representatives of the Employer attending Bid opening in the manner specified **in the BDS**.
- 25.7 The Employer shall neither discuss the merits of any Bid nor reject any Bid (**except** for late Bids, in accordance with ITB 23.1).
- 25.8 The Employer shall prepare a **record** of the Bid opening that shall include, as a minimum:
- (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
  - (b) the Bid Price, per lot (contract) if applicable, including any discounts;
  - (c) the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required; and
  - (d) any alternative Bids.
- 25.9 The Bidders' **representatives** who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

## **E. Evaluation and Comparison of Bids**

### **26. Confidentiality**

- 26.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not **officially** concerned with the Bidding process until information on Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 43.
- 26.2 Any effort by a Bidder to influence the Employer in the evaluation of the Bids or Contract **award** decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the Bidding process, it shall do so in writing.

### **27. Clarification of Bids**

- 27.1 To assist in the examination, evaluation, and comparison of the Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any **Bidder** for a clarification of its Bid given a reasonable time for a response. Any clarification submitted by a

Bidder that is not in response to a request by the Employer shall not be considered. The Employer'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 Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 31.

27.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.

**28. Deviations,  
Reservations,  
and Omissions**

28.1 During the **evaluation** of Bids, the following definitions apply:

- (a) "Deviation" is a departure from the requirements specified in the bidding document;
- (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
- (c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.

**29. Determination of  
Responsiveness**

29.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.

29.2 A substantially responsive Bid is one that meets the requirements of the bidding **document** without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

- (a) if accepted, would:
  - (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
  - (ii) limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

29.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.

29.4 If a Bid is not substantially responsive to the requirements of the bidding document, **it** shall be rejected by the Employer and may not

subsequently be made responsive by correction of the material deviation, reservation, or omission.

**30. Nonmaterial  
Nonconformities**

- 30.1 Provided that a **Bid** is substantially responsive, the Employer may waive any nonconformities in the Bid.
- 30.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 30.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only **to** reflect the price of a missing or non-conforming item or component, by adding the average price of the item or component quoted by substantially responsive Bidders. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use its best estimate.

**31. Correction of  
Arithmetical  
Errors**

- 31.1 Provided that the Bid is **substantially** responsive, the Employer shall correct arithmetical errors on the following basis:
- (a) only for admeasurement contracts, if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
  - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
  - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

- 31.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1, shall result in the rejection of the Bid.
- 32. Conversion to Single Currency** 32.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified **in the BDS**.
- 33. Margin of Preference** 33.1 Unless otherwise specified **in the BDS**, a margin of preference for domestic Bidders<sup>3</sup> shall not apply.
- 34. Subcontractors** 34.1 Unless otherwise stated **in the BDS**, the Employer does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Employer, Financial Parts
- 34.2 The subcontractor’s qualifications shall not be used by the Bidder to qualify for the Works unless their specialized parts of the Works were previously designated by the Employer **in the BDS** as can be met by subcontractors referred to hereafter as ‘Specialized Subcontractors’, in which case, the qualifications of the Specialized Subcontractors proposed by the Bidder may be added to the qualifications.
- 34.3 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified **in the BDS**. Subcontractors proposed by the Bidder shall be fully qualified for their parts of the Works.
- 35. Evaluation of Bids** 35.1 The Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Employer shall determine the Most Advantageous Bid. This is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be:
- (a) substantially responsive to the bidding document; and
  - (b) the lowest evaluated cost.
- 35.2 To evaluate a Bid, the Employer shall consider the following:

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<sup>3</sup> An individual firm is considered a domestic Bidder for purposes of the margin of preference if it is registered in the country of the Employer, has more than 50 percent ownership by nationals of the country of the Employer, and if it does not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign contractors. JVs are considered as domestic Bidders and eligible for domestic preference only if the individual member firms are registered in the country of the Employer or have more than 50 percent ownership by nationals of the country of the Employer, and the JV shall be registered in the country of the Borrower. The JV shall not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign firms. JVs between foreign and national firms will not be eligible for domestic preference.

- (a) the Bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities<sup>4</sup> for admeasurement contracts, but including Daywork<sup>5</sup> items, where priced competitively;
- (b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;
- (c) price adjustment due to discounts offered in accordance with ITB 14.4;
- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;
- (e) price adjustment for nonconformities in accordance with ITB 30.3; and
- (f) the additional evaluation factors are specified in 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 taken into account in Bid evaluation.

35.4 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the contract combinations, including any discounts offered in the Letter of Bid, is specified in Section III, Evaluation and Qualification Criteria.

**36. Comparison of Bids**

The Employer shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 35.2 to determine the Bid that has the lowest evaluated cost.

**37. Abnormally Low Bids**

37.1 An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid price.

37.2 In the event of identification of a potentially Abnormally Low Bid, the Employer shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the

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<sup>4</sup> In lump sum contracts, delete “Bill of Quantities” and replace with “Activity Schedule.”

<sup>5</sup> Daywork is work carried out following instructions of the Project Manager and paid for on the basis of time spent by workers, and the use of materials and the Contractor’s equipment, at the rates quoted in the Bid. For Daywork to be priced competitively for Bid evaluation purposes, the Employer must list tentative quantities for individual items to be costed against Daywork (e.g., a specific number of tractor driver staff-days, or a specific tonnage of Portland cement), to be multiplied by the Bidders’ quoted rates and included in the total Bid price.

subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document.

37.3 After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Employer shall reject the Bid.

**38. Unbalanced or Front Loaded Bids**

38.1 If the Bid for an admeasurement contract, which results in the lowest evaluated cost is, in the Employer's opinion, seriously unbalanced or, front loaded, the Employer may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the Bid prices with the scope of works, proposed methodology, schedule and any other requirements of the bidding document.

38.2 After the evaluation of the information and detailed price analyses presented by the Bidder, the Employer may as appropriate:

- (a) accept the Bid; or
- (b) require that the amount of the Performance Security be increased at the expense of the Bidder to a level not exceeding 20% of the Contract Price; or
- (c) reject the Bid.

**39. Qualification of the Bidder**

39.1 The Employer shall determine to its satisfaction whether the eligible Bidder that is selected as having submitted the lowest evaluated cost and substantially responsive Bid 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 Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the bidding document), or any other firm(s) different from the Bidder.

39.3 Prior to Contract award, the Employer will verify that the successful Bidder (including each member of a JV) is not disqualified by the Bank due to noncompliance with contractual SEA/SH prevention and response obligations. The Employer will conduct the same verification for each subcontractor proposed by the successful Bidder. If any proposed subcontractor does not meet the requirement, the Employer will require the Bidder to propose a replacement subcontractor.

- 39.4 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Employer shall proceed to the substantially responsive Bid which offers the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 40. Most Advantageous Bid** 39.1 Having compared the evaluated costs of Bids, the Employer shall determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be:
- (a) substantially responsive to the bidding document; and
  - (b) the lowest evaluated cost.
- 41. Employer's Right to Accept Any Bid, and to Reject Any or All Bids** 41.1 The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.
- 42. Standstill Period** 42.1 The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 46. The Standstill Period commences the day after the date the Employer has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply.
- 43. Notification of Intention to Award** 43.1 The Employer shall send to each Bidder the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
- (a) the name and address of the Bidder submitting the successful Bid;
  - (b) the Contract price of the successful Bid;
  - (c) the names of all Bidders who submitted Bids, and their Bid prices as readout, and as evaluated;
  - (d) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notification is addressed) was unsuccessful, unless the price information in c) above already reveals the reason;

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- (e) the expiry date of the Standstill Period;
  - (f) instructions on how to request a debriefing and/or submit a complaint during the standstill period.

## **F. Award of Contract**

- 44. Award Criteria**      44.1 Subject to ITB 41, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in ITB 40.
- 45. Notification of Award**      45.1 Prior to the expiration of the Bid validity, and upon expiry of the Standstill Period specified in ITB 42.1 or any extension thereof, and, upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the Conditions of Contract and Contract Forms called the “Letter of Acceptance”) shall specify the sum that the Employer will pay the Contractor in consideration of the execution of the contract (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”).
- 45.2 Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information:
- (a) name and address of the Employer;
  - (b) name and reference number of the contract being awarded, and the selection method used;
  - (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
  - (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefor;
  - (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope; and
  - (f) successful Bidder’s Beneficial Ownership Disclosure Form, if specified in BDS ITB 47.1.

- 45.3 The Contract Award Notice shall be published on the Employer's website with free access if available, or in at least one newspaper of national circulation in the Employer's Country, or in the official gazette. The Employer shall also publish the contract award notice in UNDB online.
- 45.4 Until a formal contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

**46. Debriefing by the Employer**

- 46.1 On receipt of the Employer's Notification of Intention to Award referred to in ITB 43.1, an unsuccessful Bidder has three (3) Business Days to make a written request to the Employer for a debriefing. The Employer shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.
- 46.2 Where a request for debriefing is received within the deadline, the Employer shall provide a debriefing within five (5) Business Days, unless the Employer decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Employer shall promptly inform, by the quickest means available, all Bidders of the extended standstill period
- 46.3 Where a request for debriefing is received by the Employer later than the three (3)-Business Day deadline, the Employer should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.
- 46.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidder shall bear their own costs of attending such a debriefing meeting.

**47. Signing of Contract**

- 47.1 The Employer shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement, and, if specified in the BDS, a request to submit the Beneficial Ownership Disclosure Form providing additional information on its beneficial ownership. The Beneficial Ownership Disclosure Form, if so requested, shall be submitted within eight (8) Business Days of receiving this Request.

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- 47.2 The successful Bidder shall sign, date and return to the Employer, the Contract Agreement within twenty-eight (28) days of its receipt.
- 48. Performance Security**
- 48.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish the Performance Security and, if required in the BDS, the Environmental and Social (ES) Performance Security in accordance with the General Conditions of Contract, subject to ITB 38.2 (b), using for that purpose the Performance Security and ES Performance Security Forms included in Section X, Contract Forms, or another form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country, unless the Employer has agreed in writing that a correspondent financial institution is not required.
- 48.2 Failure of the successful Bidder to submit the above-mentioned Performance Security and, if required in the BDS, the Environmental and Social (ES) Performance Security, or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid.
- 49. Adjudicator**
- 49.1 The Employer proposes the person named **in the BDS** to be appointed as Adjudicator under the Contract, at the hourly fee specified **in the BDS**, plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in his Bid. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the Particular Conditions of Contract (PCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.
- 50. Procurement Related Complaint**
- 50.1 The procedures for making a Procurement-related Complaint are as specified in the BDS.

## Section II - Bid Data Sheet (BDS)

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

ITB Reference	A. General
ITB 1.1	<p>The number of the Invitation for Bids is: <b><i>KE~EMBU COUNTY~493099-CW-RFB</i></b></p> <p>The Employer is: <b>Chief Officer, Department of Agriculture.</b>            The reference number of the Request for Bids (RFB) is: <b>RFB No: <i>KE~EMBU COUNTY~493099-CW-RFB</i></b></p> <p>The Employer is: <b>Chief Officer, Department of Agriculture,</b>  <b><i>Email: navcdpembucounty@gmail.com</i></b></p> <p>The name of the RFB is: <b>Construction of Ena fresh produce market for enhanced market participation at Kagaari South Ward, Runyenjes sub-County in Embu County</b></p> <p>The number and identification of lots (contracts) comprising this RFB is: <b>NOT APPLICABLE(N/A)</b></p>
ITB 2.1	<p>The Borrower is: <b><i>Government of Kenya.</i></b></p> <p>Loan or Financing Agreement amount: <b>Euro 223,300 million</b></p> <p>The name of the Project is: <b>NATIONAL AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT(NAVCDP)</b></p>

<b>ITB 4.1</b>	Maximum number of members in the Joint Venture (JV) shall be: <i>Two</i>
<b>ITB 4.5</b>	A list of debarred firms and individuals is available on the Bank's external website: <a href="http://www.worldbank.org/debarr">http://www.worldbank.org/debarr</a> .
<b>B. Contents of Bidding Document</b>	
<b>ITB 7.1</b>	For <b>Clarification of Bid purposes</b> only, the Employer's address is: <b>Chief Officer, Department of Agriculture.</b> Attention: <b>County Project Coordinator NAVCDP, Embu County</b> Address: <b>NAVCDP, CPCU Office Along Embu-Meru Highway inside the Regional Commissioner's Office Compound adjacent to Embu County Assembly.</b> Email address: <a href="mailto:navcdpembucounty@gmail.com">navcdpembucounty@gmail.com</a>
<b>ITB 7.1</b>	Requests for clarification should be received by the Employer no later than: <i>fourteen (14) days before bid submission deadline.</i>
<b>ITB 7.1</b>	Web page: <a href="http://www.embu.go.ke">www.embu.go.ke</a>
<b>ITB 7.4</b>	A Pre-Bid meeting <i>may take</i> place on <b>10<sup>th</sup> March, 2026</b> , within ENA open air Market along Embu-Meru Highway from 10.00 AM.
<b>C. Preparation of Bids</b>	
<b>ITB 10.1</b>	The language of the Bid is: <b>"English"</b> <b>All correspondence exchange shall be in English</b> <b>Language for translation of supporting documents and printed literature is English.</b>
<b>TB 11.1 (b)</b>	The following schedules shall be submitted with the Bid: <b>the priced Bill of Quantities for admeasurement contracts.</b>
<b>ITB 11.1 (i)</b>	The Bidder shall submit the following additional documents in its Bid: <b>Code of Conduct for Contractor's Personnel (ES)</b>  The Bidder shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub- Clause 1 (ii) of the General Conditions of Contract), to ensure compliance with the Contractor's Environmental and Social (ES) obligations under the Contract. The Bidder shall use for this purpose the Code of Conduct form provided in Section IV. No substantial modifications shall be made to this form, except that the Bidder may introduce additional requirements, including as necessary to take into account specific contract issues/risks.

**Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks**

The Bidder shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks:

**(a) Sexual Exploitation, and Abuse (SEA)**

The contractor should develop a GBVSEA prevention and response management and action plan. She should ensure availability of Gender/GBV/SEA. focal person to implement mitigation measures in the ESIA. The bidder will ensure that appropriate signages are in place and warnings on GBV/SEAH. She will be expected to sensitize workers on the referral pathways available and encourage reporting

**(b) Inadequate Stakeholder Engagement and Information Disclosure**

The bidder shall develop a Stakeholder Engagement Plan prior starting of the project in compliance with ESS10, she should ensure that information disclosure on the proposed project in accordance with the project designs and BoQ is done in accordance with the provisions of ESS10.

**(c) Occupational Health and Safety Management**

The bidder should have in place a OH&S management plan that will guide in managing occupational health and safety risks as well as having on site a trained person in health and safety on site during the project, as a minimum the Health and Safety Management Plan should include the following details:

- Site Details
  - Site Location, Demarcation and Loss of Biodiversity Plan. The site shall be appropriately demarcated and fenced off
  - Site Induction Details. All staff shall be inducted on health and safety and assembly point well labelled
  - Location of Health and Safety Kits will be identified and functional kits supplied
  - Incident Reporting Details. A log/register on all incidences will be maintained during project cycle
  - Welfare Provisions
- Persons Responsible
  - Nominated Health and Safety Manager (management team) as a pre-qualification criteria
  - Construction Management Plan
  - Site Foreman
  - Site First Aider(s) will be trained to handle all accidents and first aid
- The Health and Safety Management Manual and Pollution Prevention and Control.

**(d) Community Health and Safety associated risks:**

The bidder shall have in place a community Health and Safety plan. The proponent will be expected to dispose off any waste as directed by site Engineer without endangering the communities around

**(e) Poor Labor Management**

	<p>The bidder shall develop a Labour Management Plan that will provide details of how she will manage working conditions, workers relationships, forced labor, child labor (submit child labor policy) grievance mechanism for workers and grievance mechanism for other stakeholders (including community level stakeholders), and how to ensure compliance from suppliers and sub-contractors. It is expected that a worker’s code of conduct is in place. The Contractor shall maintain a master roll to capture all workers on site, payments, statutory deductions, workers insurance</p> <p><b>(f) Poor Traffic Management and associated accidents &amp; risks:</b>  <b>The Contractor will</b> develop a traffic management plan that will ensure safety of local communities and workers from construction traffic coupled with appropriate signages</p> <p><b>(g) Insecurity</b>  the contractor will develop an SMP that will provide details of how to assess and implement measures to manage the security risks of the Project, including the risks of engaging security personnel to safeguard project workers, sites, assets, and activities in the ESMP, in a manner satisfactory to World Bank, and guided by the principles of proportionality and GIIP, and by applicable law, in relation to hiring, rules of conduct, training, equipping, and monitoring of such personnel. Night guards to be deployed during project implementation. Night security lights to be installed</p> <p><b>(h) Grievances related to the project implementation</b>  The bidder shall in consultation establish a GRM team to resolve grievances</p> <p><b>(i) Poor Waste Management</b>  The proposed Ena fresh produce market will generate both solid and liquid waste during construction and operation phases. To avoid environmental pollution as a result of solid and liquid waste, the contractor will provide solid waste management structure and construct an ablution block with a bio digester. Further, in this SPR, the ESMP has adequately addressed how liquid and solid waste will be managed to avoid environmental pollution.</p> <p><b>Quality Assurance Systems</b> - The Bidder shall provide details of the proposed quality assurance system intended to be used to ensure successful, safe and planned access to site; production; field operations; inspection, sampling and site testing; and completion of the works.</p>
<b>ITB 13.1</b>	Alternative Bids <i>shall not be</i> considered.
<b>ITB 13.2</b>	Alternative times for completion <i>shall not be</i> permitted.
<b>ITB 13.4</b>	Alternative technical solutions shall be permitted for the following parts of the Works: <i>Not Applicable</i>
<b>ITB 14.5</b>	The prices quoted by the Bidder <i>shall not be</i> subject to adjustment during the performance of the Contract.

<b>ITB 15.1</b>	The price shall be quoted by the Bidder in: <b>Kenya shillings (KES).</b>
<b>ITB 18.1</b>	<i>The Bid shall be valid until 30<sup>th</sup> October, 2026</i>
<b>ITB 18.3 (a)</b>	The Bid price shall be adjusted by the following factor(s): <b>Not Applicable</b>
<b>ITB 19.1</b>	Bid bond of <b>KES. 740,000/=</b> ( <i>Seven Hundred and Forty Thousand Shillings only</i> ) from a reputable commercial bank
<b>ITB 19.3 (d)</b>	Other types of acceptable securities: <b>None</b>
<b>ITB 19.9</b>	<b>If a bid Security shall be required, a Bid-Securing Declaration shall not be required, and vice versa.</b> A bid security ‘ <b>shall be</b> ’ required. Bid Security shall be the amount currency of the bid security shall be <b>KES. 740,000(Seven Hundred and forty Thousand Shillings only)</b> or its equivalent in a freely convertible currency
<b>ITB 20.1</b>	In addition to the original of the Bid, the number of copies is: <b>ONE COPY</b>
<b>ITB 20.3</b>	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: The written confirmation of authorization to sign on behalf of the Bidder shall consist of a) Power of Attorney; and (b)An undertaking signed by all parties  (i) stating that all parties shall be jointly and severally liable, as required in accordance with ITB 4.1(a), and nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the Joint Venture, Consortium or Association (JVCA) during the bidding process and, in the event the JVCA is awarded the Contract, during Contract execution.
<b>D. Submission and Opening of Bids</b>	
<b>ITB 22.1</b>	For <b><u>Bid submission purposes</u></b> only, the Employer’s address is: <b>Chief Officer, Department of Agriculture,</b> Attention: <b>County Project Coordinator (NAVCDP)</b> Address: NAVCDP offices located at Embu County Commissioner’s compound. Floor/ Room number: <b>Room 1</b> City: <b>Embu Town</b> ZIP Code: <b>60100</b> Country: <b>Kenya</b> Telephone: <b>+254706014014</b> Facsimile number: <b>Not Applicable</b> Electronic mail address: <b><u>navcdpembucounty@gmail.com</u></b> The deadline for Bid submission is: Date: <b>24<sup>th</sup> March, 2026</b> Time: <b>1100 Hours</b>

	Bidders <b>shall not</b> have the option of submitting their Bids electronically. The electronic Bidding submission procedures shall be: <b>Not Applicable</b>
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<b>ITB 25.1</b>	<p>The Bid opening shall take place at:  Address: Embu County Government Headquarters offices  Floor/ Room number: <b>Procurement Boardroom</b>  City: <b>Embu Town</b>  ZIP Code: <b>60100</b>  Country: <b>Kenya</b>  Telephone: <b>+254706014014</b>  Facsimile number: <b>Not Applicable</b>  Electronic mail address: <u><b>navcdpembucounty@gmail.com</b></u>  The deadline for Bid submission is:  Date: <b>24<sup>th</sup> March, 2026</b>  Time: <b>1100 Hours</b></p>
<b>ITB 25.1</b>	The electronic Bid opening procedures shall be: <i>Not Applicable</i>
<b>ITB 25.6</b>	The Letter of Bid and Schedules shall be initialed by <b>A L L</b> Representatives of the Employer conducting Bid opening.
<b>E. Evaluation and Comparison of Bids</b>	
<b>ITB 32.1</b>	<p>The currency that shall be used for Bid evaluation and comparison purposes to convert at the selling exchange rate all Bid prices expressed in various currencies into a single currency is: <b>Kenya Shillings</b>  The source of exchange rate shall be: <b>The Central Bank of Kenya</b>  The date for the exchange rate shall be: <b>Deadline for submission of the Bids.</b></p>
<b>ITB 33.1</b>	A margin of domestic preference <i>“shall not”</i> apply.
<b>ITB 34.1</b>	At this time the Employer <b>does not intend</b> to execute certain specific parts of the Works by subcontractors selected in advance.
<b>ITB 34.2</b>	<p>The parts of the Works for which the Employer permits Bidders to propose Specialized Subcontractors are designated as follows: <b>Not Applicable</b></p> <p>For the above-designated parts of the Works that may require Specialized Subcontractors, the relevant qualifications of the proposed Specialized Subcontractors will be added to the qualifications of the Bidder for the purpose of evaluation.</p>
<b>ITB 34.3</b>	<p>Contractor’s proposed subcontracting: Maximum percentage of subcontracting permitted is: <b>20% of the total contract amount</b></p> <p>Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity (ies) or parts of the Works to be subcontracted along with complete details of the subcontractors and their qualification and experience.</p>
<b>F. Award of Contract</b>	

<b>ITB 47.1</b>	The successful Bidder <i>shall</i> submit the Beneficial Ownership Disclosure Form.
<b>ITB 49</b>	<p><b>The Adjudicator proposed by the Employer:</b>  Wairimu Rugaita &amp; Co. Advocate,  P.O Box 593-60100, Embu  E-mail address: info@wairimurugaitaadvocates.com  Professional Fee: Kshs. 20,000 per hour</p>
<b>ITB 50.1</b>	<p>The procedures for making a Procurement-related Complaint are detailed in the “Procurement Regulations for IPF Borrowers (Annex III).” If a Bidder wishes to make a Procurement-related Complaint, the Bidder shall submit its complaint following these procedures, In Writing (by the quickest means available, such as by email or fax), to:</p> <p><b>For the attention:</b> Jane Muriithi  <b>Title/position:</b> Project Coordinator (NAVCDP)  <b>Employer:</b> Chief Officer, Department of Agriculture  Embu County Government  <b>Email address:</b> <i>navcdpembucounty@gmail.com</i></p> <p>In summary, a Procurement-related Complaint may challenge any of the following:</p> <ol style="list-style-type: none"> <li>1. the terms of the Bidding Documents; and</li> <li>2. the Employer’s decision to award the contract.</li> </ol>

## **Section III - Evaluation and Qualification Criteria**

Wherever a Bidder is required to state a monetary amount, Bidders should indicate the Ksh equivalent using the rate of exchange determined as follows:

- 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 are to be converted) was originally established; or
- Value of single contract - Exchange rate prevailing on the date of the contract.

Exchange rates shall be taken from the publicly available source identified in the ITB 32.1. Any error in determining the exchange rates in the Bid may be corrected by the Employer

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## **1. Margin of Preference (NOT APPLICABLE)**

If BDS so specifies, the Employer will grant a margin of preference of 7.5% (seven and one-half percent) to domestic contractors, in accordance with, and subject to, the following provisions:

- (a) 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 Borrower and accepted by the Bank, a particular contractor or group of contractors qualifies for a domestic preference. The bidding document shall clearly indicate the preference and the method that will be followed in the evaluation and comparison of Bids to give effect to such preference.
- (b) After Bids have been received and reviewed by the Employer, responsive Bids shall be classified into the following groups:
  - (i) Group A: Bids offered by domestic contractors eligible for the preference.
  - (ii) Group B: Bids offered by other contractors.

All evaluated Bids in each group shall, as a first evaluation step, be compared to determine the Bid with lowest evaluated cost, and the Bid with the lowest evaluated cost in each group shall be further compared with each other. If a result of this comparison, a Bid from Group A is the lowest, it shall be selected for the award as the Most Advantageous Bid, if the Bidder is qualified. If a Bid from Group B is the lowest, as a second evaluation step, all Bids from Group B shall then be further compared with the lowest evaluated cost from Group A. For the purpose of this further comparison only, an amount equal to 7.5% (seven and one-half percent) of the respective Bid price corrected for arithmetical errors, including unconditional discounts but excluding provisional sums and the cost of dayworks, if any, shall be added to the evaluated cost offered in each Bid from Group B. If the Bid from Group A is the lowest, it shall be selected for award. If not, the lowest evaluated cost from Group B based on the first evaluation step shall be selected.

The Employer shall use the criteria and methodologies listed in this Section to evaluate Bids. By applying these criteria and methodologies, the Employer shall determine the Most Advantageous Bid. This is the Bid that has been determined to be:

- (a) substantially responsive to the bidding document, and
- (b) the lowest evaluated cost.

## **2. Evaluation**

In addition to the criteria listed in ITB 35.2 (a) – (e) the following criteria shall apply:

### **2.1 Adequacy of Technical Proposal**

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VII, Works' Requirements.

### **2.2 Multiple Contracts (NOT APPLICABLE)**

Pursuant to ITB 35.4 of the Instructions to Bidders, if Works are grouped in multiple contracts, evaluation will be as follows:

#### **(a) Award Criteria for Multiple Contracts [ITB 35.4]:**

##### **Lots**

Bidders have the option to Bid for any one or more lots. Bids will be evaluated lot-wise, taking into account discounts offered, if any, after considering all possible combination of lots. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined lots, subject to the selected Bidder(s) meeting the required qualification criteria for lot or combination of lots as the case may be.

##### **Packages**

Bidders have the option to Bid for any one or more packages and for any one or more lots within a package. Bids will be evaluated package-wise, taking into account discounts offered, if any, for combined packages and/or lots within a package. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined packages, subject to the selected Bidder(s) meeting the required qualification criteria for combination of packages and or lots as the case may be.

#### **(b) Qualification Criteria for Multiple Contracts:**

Section III describes criteria for qualification for each lot (contract) for multiple lots (contracts). The criteria for qualification is aggregate minimum requirement for respective lots as specified under items 3.1, 3.2, 4.2(a) and 4.2(b). However, with respect to the specific experience under item 4.2 (a) of Section III, the Employer will select any one or more of the options as identified below:

N is the minimum number of contracts

V is the minimum value of a single contract

**(a) For one Contract:**

**Option 1:**

(i) N contracts, each of minimum value V;

Or

**Option 2:**

(i) N contracts, each of minimum value V; or

(ii) Less than or equal to N contracts, each of minimum value V, but with total value of all contracts equal or more than  $N \times V$ .

**(b) For multiple Contracts**

**Option 1:**

(i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has submitted Bids as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

---etc.

or

**Option 2:**

(i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has submitted Bids as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

---etc., **or**

(ii) Lot 1: N1 contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal or more than  $N1 \times V1$ .

Lot 2: N2 contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal or more than  $N2 \times V2$ .

Lot 3: N3 contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal or more than  $N3 \times V3$ .

----etc.

Or

**Option 3:**

(i) Minimum requirements for combined contract(s) shall be the aggregate requirements for each contract for which the Bidder has bid for as follows, and N1, N2, N3, etc. shall be different contracts:

Lot 1: N1 contracts, each of minimum value V1;

Lot 2: N2 contracts, each of minimum value V2;

Lot 3: N3 contracts, each of minimum value V3;

----etc., **or**

(ii) Lot 1: N1 contracts, each of minimum value V1; or number of contracts less than or equal to N1, each of minimum value V1, but with total value of all contracts equal or more than  $N1 \times V1$ .

Lot 2: N2 contracts, each of minimum value V2; or number of contracts less than or equal to N2, each of minimum value V2, but with total value of all contracts equal or more than  $N2 \times V2$ .

Lot 3: N3 contracts, each of minimum value V3; or number of contracts less than or equal to N3, each of minimum value V3, but with total value of all contracts equal or more than  $N3 \times V3$ .

----etc., or

(iii) Subject to compliance as per (ii) above with respect to minimum value of single contract for each lot, total number of contracts is equal or less than  $N1 + N2 + N3$  ---but the total value of all such contracts is equal or more than  $N1 \times V1 + N2 \times V2 + N3 \times V3$  ----.

**2.3 Alternative Completion Times (NOT APPLICABLE)**

An alternative Completion Time, if permitted under ITB 13.2, will be evaluated as follows:

## **2.4 Sustainable procurement (NOT APPLICABLE)**

*[If specific sustainable procurement technical requirements have been specified in Section VII- Specification, either state that (i) those requirements will be evaluated on a pass/fail (compliance basis) or otherwise (ii) in addition to evaluating those requirements on a pass/fail (compliance basis), if applicable, specify the monetary adjustments to be applied to Bid prices for comparison purposes on account of Bids that exceed the specified minimum sustainable procurement technical requirements.]*

## **2.5 Alternative Technical Solutions for specified parts of Works (NOT APPLICABLE)**

The acceptability of alternative technical solutions of parts of the Works, if permitted under ITB 13.4, will be determined as follows: NOT APPLICABLE

## **2.6 Specialized Subcontractors NOT APPLICABLE**

If permitted under ITB 34, only the specific experience of Subcontractors for specialized works permitted by the Employer will be considered. The general experience and financial resources of the Specialized Subcontractors shall not be added to those of the Bidder f

# 1. Qualification

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
<b>1. Eligibility</b>							
1.1	<b>Nationality</b>	Nationality in accordance with ITB 4.4	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	<b>Conflict of Interest</b>	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.3	<b>Bank Eligibility</b>	Not having been declared ineligible by the Bank, as described in ITB 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
1.4	<b>State-owned enterprise or institution of the Borrower country</b>	Meets conditions of ITB 4.6	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.5	<b>United Nations resolution or Borrower’s country law</b>	Not having been excluded as a result of prohibition in the Borrower’s country laws or official regulations against commercial relations with the Bidder’s country, or by an act of compliance with UN Security Council resolution, both in accordance with ITB 4.8 and Section V.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
<b>2. Historical Contract Non-Performance</b>							
2.1	<b>History of Non-</b>	Non-performance of a	Must meet	Must meet	Must meet	N/A	Form CON-2

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
	<b>Performing Contracts</b>	contract <sup>1</sup> did not occur as a result of contractor default since 1 <sup>st</sup> January 2022.	requirement <sup>1</sup> & <sup>2</sup>	requirements	requirement <sup>2</sup>		
2.2	<b>Suspension Based on Execution of Bid /Proposal Securing Declaration by the Employer</b>	Not under suspension based on execution of a Bid/Proposal Securing Declaration pursuant to ITB 4.7 and ITB 19.9.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Letter of Bid
2.3	<b>Pending Litigation</b>	Bidder's financial position and prospective long term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder	Must meet requirement	NOT APPLICABLE	Must meet requirement	N/A	Form CON – 2
2.4	<b>Litigation History</b>	No consistent history of court/arbitral award decisions against the	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form CON – 2

<sup>1</sup> Nonperformance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

<sup>2</sup> This requirement also applies to contracts executed by the Bidder as JV member.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
		Bidder <sup>3</sup> since 1 <sup>st</sup> January 2022					
2.5	<b>Declaration: Environmental and Social (ES) past performance</b>	Declare any civil work contracts that have been suspended or terminated and/or performance security called by an employer for breach of environmental or social (including Sexual Exploitation and Abuse) contractual obligations in the past five years. <sup>4</sup>	Must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration.	NOT APPLICABLE	Each must make the declaration. Where there are Specialized Sub-contractor/s, the Specialized Sub-contractor/s must also make the declaration.	NOT APPLICABLE	Form CON-3 ES Performance Declaration
2.6	<b>Bank's SEA and/or SH Disqualification</b>	At the time of Contract Award, not subject to disqualification by the Bank for non-compliance with SEA/SH obligations	Must meet requirement (including each subcontractor proposed by the Bidder)	NOT APPLICABLE	Must meet requirement (including each subcontractor proposed by the Bidder)	NOT APPLICABLE	Letter of Bid, Form CON-4
		If the Bidder had been subject to disqualification by the Bank for non-compliance with SEA/SH obligations, the Bidder shall either (i)	Must meet requirement (including each subcontractor proposed by the Bidder)	NOT APPLICABLE	Must meet requirement (including each subcontractor proposed by the Bidder)	NOT APPLICABLE	Letter of Bid, Form CON-4

<sup>3</sup> The Bidder shall provide accurate information on the Letter of Bid about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of court/arbitral awards against the Bidder or any member of a joint venture may result in disqualifying the Bidder.

<sup>4</sup> The Employer may use this information to seek further information or clarifications in carrying out its due diligence.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
		provide evidence of an arbitral award on the disqualification made in its favor; or (ii) demonstrate that it has adequate capacity and commitment to comply with SEA/SH prevention and response obligations; or (iii) provide evidence that it has already demonstrated such capacity and commitment on another Bank financed Works contract.					
<b>3. Financial Situation and Performance</b>							
3.1	<b>Financial Capabilities</b>	(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (Independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as <b>25 million</b> for the subject contract(s) net	Must meet requirement	Must meet Requirement	NOT APPLICABLE	NOT APPLICABLE	Form FIN – 3.1, with attachments

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
		of the Bidder's other commitments					
		(ii) The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract Commitments.	Must meet requirement	Must meet requirement	NOT APPLICABLE	NOT APPLICABLE	
		(iii) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last Three years (2022, 2023, 2024) shall be submitted and must demonstrate the current soundness of the Bidder's financial position and indicate its prospective long-term profitability.	Must meet requirement	NOT APPLICABLE	Must meet requirement	NOT APPLICABLE	
3.2	<b>Average Annual Construction Turnover</b>	Minimum average annual construction turnover of <b>Kes 148 Million.</b>	Must meet requirement	Must meet requirement	Must meet <u>35%</u> , of the requirement	Must meet <u>70%</u> , of the requirement	Form FIN – 3.2

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
		calculated as total certified payments received for contracts in progress and/or completed within the last Three (3) years (2022, 2023, 2024), divided by three years					
<b>4. Experience</b>							
4.1 (a)	<b>General Construction Experience</b>	Experience under construction contracts in the role of prime contractor, JV member, subcontractor, or management contractor for at least the last <b>5</b> years, starting from 1 <sup>st</sup> January, <b>2020</b>	Must meet requirement	NOT APPLICABLE	Must meet requirement	NOT APPLICABLE	Form EXP – 4.1
4.2 (a)	<b>Specific Construction &amp; Contract Management Experience</b>	(i) A minimum number of <b>two (2)</b> similar contracts specified below that have been satisfactorily	Must meet requirement	Must meet requirement <sup>7</sup>	NOT APPLICABLE	Must meet the following requirements for the key activities listed below	Form EXP 4.2(a)

<sup>7</sup> In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
		<p>and substantially<sup>5</sup> completed as a prime contractor, joint venture member<sup>6</sup>, management contractor or sub-contractor<sup>6</sup> between 1<sup>st</sup> January, 2020 and bid submission deadline</p> <p>(i) <b>Two (2)</b> contracts, each of minimum value <b>Kes.30.0 million;</b></p> <p>Or</p> <p>(ii) <b>One (1)</b> contract each of minimum value <b>Kes. 60 million.</b></p> <p>The similarity of the contracts shall be based on the following:</p> <p>(a) <b>Civil works and building works</b></p> <p>(b) <b>Long-span Steel truss, fabrication and erection</b></p> <p>(c) <b>Electrical works</b></p> <p>(d) <b>Construction of markets, warehouses and industrial sheds.</b></p>				Not Applicable	

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<sup>5</sup> Substantial completions shall be based on 80% or more works completed under the contract.

<sup>6</sup> For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
4.2 (b)		For the above and any other contracts [substantially completed and under implementation] as prime contractor, joint venture member, or sub-contractor between 1 <sup>st</sup> January, 2020 and application submission deadline, a minimum construction experience in the following key activities successfully completed <sup>8</sup> : <b>(a) Civil works and building works (≥ 1000M<sup>2</sup>)</b> <b>(b) Long-span Steel truss, fabrication and erection (≥ 15 m)</b> <b>(c) Electrical works (100 KWh)</b>	Must meet requirements [Specify activities that may be met through a specialized subcontractor, if permitted in accordance with ITB 34.3]	Must meet requirements [Specify activities that may be met through a Specialized Subcontractor, if permitted in accordance with ITB 34.3]	NOT APPLICABLE	Must meet the following requirements for key activities listed below [if applicable, out of the key activities in the first column of this 4.2 b), list key activities (volume, number or rate of production as applicable) and the corresponding minimum requirements	Form EXP – 4.2 (b)

		<b>(d) Construction of markets, warehouses and industrial sheds (500-1000 m<sup>2</sup>).</b>					
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<sup>8</sup> Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All members Combined	Each Member	At least one Member	
						<i>that have to be met by one member, otherwise this cell should state: "NOT APPLICABLE".]</i>	



		<p>(SEA) prevention and response action plan];</p> <p>(d) Stakeholder Engagement Plan (SEP) and Information Disclosure</p> <p>(e) Occupational Health and Safety (OHS) Management Plan</p> <p>(f) Community Health and Safety Plan</p> <p>(g) Labor Management Plan</p> <p>(h) Traffic Management Plan</p> <p>(i) Security management plan</p> <p>(j) Gender based violence and sexual exploitation and abuse (GBV/SEA) prevention and response action plan</p> <p>(k) Grievance Redress Mechanism (GRM).</p> <p>(l) Child</p>					
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		<b>Protection Strategy (CPS).</b> <b>(m) Waste Management Plan (WMP)</b> <b>(n) Site Specific Security Management Plan (SMP)</b> <b>(o) Labor Influx Management Plans (LIMP)</b> <b>(p) Quality Assurance Systems</b>					
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*Note: [For Multiple lots (contracts) specify financial and experience criteria for each lot under 3.1, 3.2, 4.2(a),4.2(b) and 4.2 (c)]*

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<sup>9</sup> The minimum experience requirement for multiple contracts will be the sum of the minimum requirements for respective individual contracts, unless specified otherwise.

## 2. Key Personnel

The Bidder must demonstrate that it will have suitably qualified (and in adequate numbers) Key Personnel, as described in the Specification.

The Bidder shall provide details of the Key Personnel and such other Key Personnel that the Bidder considers appropriate to perform the Contract, together with their academic qualifications and work experience. The Bidder shall complete the relevant Forms in Section IV, Bidding Forms.

## 3. Equipment

The Bidder must demonstrate that it will have access to the key Contractor's equipment listed hereafter:

No.	Equipment Type and Characteristics	Minimum Number required
	<b>Key Equipment</b>	
1.	Concrete Mixer-0.5-1.0 m <sup>3</sup> capacity	1
2.	Water Bowser (10,000 litres)	1
3.	Back Hoe 65-85 HP	1
4.	Truck/lorry/tipper (10 Tons and above)	2
5.	Concrete Poker Vibrator 45mm dia.	1
6.	Vibrating Roller of 10 tonne capacity	1
7.	Pick-up of at least 1 tonne capacity	1

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV.

# Section IV - Bidding Forms

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## Letter of Bid

*INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT*

*The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.*

*Note: All italicized text is to help Bidders in preparing this form.*

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

**RFB No.:** *[insert number of RFB process]*

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

To: *[insert complete name of Employer]*

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with ITB 8;
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration or Proposal-Securing Declaration in the Employer's Country in accordance with ITB 4.7;
- (d) **Exploitation and Abuse (SEA) and/or Sexual Harassment (SH):** *[select the appropriate option from (i) to (v) below and delete the others].*

We *[where JV, insert: "including any of our JV members"]*, and any of our subcontractors:

- i. *[have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]*
- ii. *[are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]*
- iii. *[had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.]*
- iv. *[had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently provided and demonstrated that we have adequate capacity and commitment to comply with SEA and SH prevention and response obligations.]*
- v. *[had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached documents*

demonstrating that we have adequate capacity and commitment to comply with SEA and SH prevention and response obligations.]

(e) **Conformity:** We offer to execute in conformity with the bidding document the following Works: [insert a brief description of the Works]

(f) **Bid Price:** The total price of our Bid, excluding any discounts offered in item (f) below is: *[Insert one of the options below as appropriate]*

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

Or

*[Option 2, in case of multiple lots:] (a) Total price of each lot [insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]; and (b) Total price of all lots (sum of all lots) [insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies];*

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

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

(ii) 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];*

(h) **Bid Validity:** Our Bid shall be valid until *[insert day, month and year in accordance with ITB 18.1]*, and it shall remain binding upon us and may be accepted at any time on or before this date;

(i) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security *[and an Environmental and Social (ES) Performance Security, **Delete if not applicable**]* in accordance with the bidding document;

(j) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder or as a subcontractor, and we are not participating in any other Bid(s) as a Joint Venture member, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;

(k) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;

- (l) **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 ITB 4.6];*
- (m) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding 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.”)*

- (n) **Binding Contract:** We understand that this Bid, 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;
- (o) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive;
- (p) **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; and
- (q) **Adjudicator:** We accept the appointment of *[insert name proposed in Bid Data Sheet]* as the Adjudicator.

***[or]***

We do not accept the appointment of *[insert name proposed in Bid Data Sheet]* as the Adjudicator, and propose instead that *[insert name]* be appointed as Adjudicator, whose daily fees and biographical data are attached.

**Name of the Bidder:** *\*[insert complete name of the Bidder]*

**Name of the person duly authorized to sign the Bid on behalf of the Bidder:\*\****[insert complete name of person duly authorized to sign the Bid]*

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

**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*]

\*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

\*\* : Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid

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# Schedules

## Bill of Quantities

### PREAMBLE TO BILL OF QUANTITIES

#### 1. GENERAL

- 1.1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications and drawings
- 1.2. The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis for payment will be the actual quantities of works ordered and carried out as measured by the contractor and verified by the engineer and valued at the rates and the prices bid in the priced Bill of quantities where applicable and otherwise at such rates and prices as the Engineer may fix within the terms of the contract
- 1.3. The rates and prices bid in the priced Bill of quantities shall, except in so far as it is otherwise provided under the contract , include all constructional plant, labour , supervision , materials , erection, maintenance , insurance , profit , taxes , and duties, together with all general risks , liabilities and obligations set out or implied in the Contract.
- 1.4. A rate or price shall be entered against each item in the Priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 1.5. The whole set of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be

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deemed to be distributed among the rates and prices entered for the related Items of work

- 1.6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the Priced Bill of Quantities.
- 1.7. Provisional sums included and so designated in the Bill of Quantities shall be expended in the whole or in part at the direction of the Engineer in accordance with Sub-clauses 13.4, 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which no instruction will be required from the Engineer
- 1.8. The Method of measurement of completed work for payment shall be Admeasurement in general according to “Civil Engineering Standard Method of Measurement” (CESMM4, Fourth Edition) published by the Institution of Civil Engineers, London, 1991

REPUBLIC OF KENYA



EMBU COUNTY GOVERNMENT

# CONSTRUCTION OF ENA FRESH PRODUCE MARKET

## BILLS OF QUANTITIES

**Prepared by:**

Department of Public Works  
P.O. Box 29- EMBU.

EMBU COUNTY

# TECHNICAL SPECIFICATIONS

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## PART I: MATERIALS

### 1.1 MATERIALS GENERALLY

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

### 1.2 MATERIALS FOR WHICH THERE IS A KENYA BUREAU OF STANDARDS SPECIFICATION

All materials used in the works for which KENYA Bureau of Standards Specification has been published shall conform to the latest edition thereof in every way.

The Architect reserves the right to demand that the Contractor shall obtain at his own expense a certificate in respect of any materials to state that it is in accordance with the Kenyan Bureau of Standard Specification.

## PART 2: DEMOLITIONS AND ALTERATIONS

### 2.1 DEMOLITION

Demolitions, taking out and cutting away shall be carefully performed and every precaution shall be taken to ensure the safety of the works. If damage should occur in the carrying out of the demolitions or alterations the contractor shall reinstate and make good the same at his own expense.

### 2.2 PROTECTION

Supply, erect and maintain during the cutting of openings etc, all necessary protection to the existing premises against damage by weather or other causes.

### 2.3 LAYING THE DUST

Allow for laying the dust as far as possible during the alteration by watering with a hose or other means.

## PART 3: SITE CLEARANCE, EXCAVATION AND EARTHWORKS

### 3.0 ARCHITECT OR ENGINEER

Where the word 'Engineer' is used in these descriptions of Materials and Workmanship, it shall in all appropriate cases be used and construed as the Structural Engineer. For this purpose the Engineer shall be deemed vested with the duties of and be the representative of the Architect.

### 3.1 DISCREPANCIES IN DESCRIPTIONS

The drawings take precedence over the bills of quantities.

### 3.2 **TEST AND SAMPLES**

Unless otherwise described in the Bills of Quantities, the Contractor will be responsible for all the costs involved in testing materials as described hereinafter. He will also be responsible for all the costs involved in supplying samples of materials or workmanship as required hereinafter to the satisfaction of the Engineer. The cost of replacing materials fixed or placed in position which do not comply with the required test results or approved samples shall be borne solely by the contractor. Samples of materials shall be submitted as soon as possible after the Contract is let. No deliveries in bulk shall be made until the samples are approved by the Engineer.

### 3.3 **SITE CLEARANCE**

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

### 3.4 **GRUBBING**

Grubbing up roots etc. shall include the following and disposal shall be as described under the foregoing clause:

1. Stumps and roots of large trees shall be completely removed
2. Stumps and roots of small trees, bushes or other vegetation shall be completely removed to a depth of at least 600 mm below formation.
3. Smaller stumps and roots of vegetation up to 25 mm thick shall be completely removed to a depth of 230 mm below formation.
4. Fine roots shall be removed to as great depth as is practicable by hand.

Except where the area of grubbing is to be excavated, all resulting holes shall be filled up solid with approved material compacted to the same relative density as the surrounding material.

### 3.5 **EXCAVATION**

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

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

### 3.6 **HARD ROCK**

Any rock or other hard materials encountered in excavating to the required depths which in the opinion of the Architect or Engineer can only be removed by wedges, compressed air or other special plant, or explosives shall be paid for as an extra and the price shall include for trimming and levelling.

No blasting will be allowed without prior written permission from the Engineer and relevant Government Authority. Material which can be removed by pick or Excavator, ripper or similar mechanical plant will not be classed as rock.

- a) The foundation trenches and column bases shall be excavated to the widths and depths of the concrete foundations shown on the drawings or to such widths and depths as the Engineer may instruct after examination of the excavations.

Quantities of all excavations shall be measured and valued by the Quantity Surveyor and any difference between such measurements and the measurements herein given shall be dealt with as a variation to the Contract.

If however, the Contractor excavates to any greater depths than shown in the drawings or as instructed by the Engineer, then he shall at his own expense fill in such extra depth of excavation with concrete as specified for the foundations to the satisfaction of the Engineer.

The Contractor shall not be paid for the cost of any excavation executed deeper or wider than shown on the drawings or instructed by the Engineer or for the cost of back filling such excavation or disposing of surplus.

- b) The Contractor shall report to the Engineer when secure bottoms have been obtained to the excavations and are ready to receive the foundation concrete. Any concrete or other work put in before the excavations have been inspected and approved by the Engineer shall, if so directed, be removed and new work substituted in accordance with the specification after excavations have been approved, all at the Contractor's expense.
- c) The bottoms of all foundation trenches and column bases shall be trimmed square and level. The Contractor shall form such steps on bottoms of foundation trenches as the Engineer may consider necessary in such positions and to such depths as he may direct.

### 3.7 **SURPLUS SOIL DISPOSAL**

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

### 3.8 **TOP SOIL FOR SPREADING**

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

### 3.9 **FILLING UNDER SURFACE BEDS IN BUILDINGS**

#### i) **Murram filling**

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

C.B.R. is obtained.

#### ii) **Hardcore filling**

Hardcore filling shall be crushed rock, broken brick, broken concrete or other approved hard

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

Where rolling by 10 tonne smooth wheeled roller or 2 tonne vibrating roller is impossible, compaction shall be by hand or mechanical tampers. Each layer shall be compacted by at least 8 passes of the roller.

The top surface of the hardcore shall be levelled or graded to falls as required and blinded with similar material broken to 25 mm gauge and surfaced with stone dust and well wetted before consolidation by the roller. The surface so obtained shall be to the Engineer's approval.

### 3.10 **MATERIALS FOUND IN EXCAVATIONS**

All materials classified as rock may, if approved by the Architect or Engineer be used as hardcore filling and the measured quantities of imported filling will be adjusted accordingly; all rock so used must be broken to the required size as before described before being used.

No sand, aggregate, murrum or other material found in the excavations is to be used in the works without the written permission of the Architect.

### 3.11 **FILLING OBTAINED FROM THE EXCAVATIONS**

Filling obtained from surplus excavated materials is to be free from all weeds, roots, vegetable soil or other unstable materials and is to be filled in layers each of not more than 230 mm finished thickness. Each layer to be well wetted and consolidated as described herein.

### 3.12 **INSECTICIDE TREATMENT**

Where described, the top surface of filling shall be treated with Pesticide to be applied and approved firm and in accordance with the manufacturer's instructions and subject to a ten year guarantee to the satisfaction of the Architect.

### 3.13 **POLYTHENE SHEETING**

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

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

## **PART 4: CONCRETE WORK**

### 4.1 **CODES OF PRACTICE**

All workmanship, materials, tests and performances in connection with reinforced concrete shall be in conformity with the latest edition of the British Standard for concrete works (B.S 8110 parts 1 & 2, BS 8004, B.S 8007) and any other approved Local and International Standards. Where inconsistency exists between these preambles and these Standards, the

Contractor shall notify the Engineer in good time for his Clarification as to which of the two shall prevail. Such clarification shall not have cost implications on the Contract.

#### 4.2 **SUPERVISION**

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

As and when required by the Engineer the Contractor shall prepare and submit, before commencing the work, a time-chart (additional to the general programme) detailing the various operations for concrete works.

#### 4.3 **CONTRACTOR'S PLANT, EQUIPMENT AND CONSTRUCTION PROCEDURES**

Not less than 30 days prior to the installation of the Contractor's plant and equipment for processing, handling, transportation, storing and placing concrete, the Contractor shall submit drawings for approval by the Engineer, showing proposed general plant arrangement, together with a general description of the equipment he proposes to use.

After completion of installation, the operation of the plant and equipment shall be subject to the approval of the Engineer.

Where these Preambles, the Bills of Quantities or the Drawings require specific procedures to be followed, such requirements are not to be construed as prohibiting use by the Contractor of alternative procedures providing these have been approved by the Engineer in advance.

Approval of plant and equipment or their operation, or of any construction procedure, shall not operate to waive or modify any provision or requirements contained in the Preambles governing the quality of the materials of the finished work.

#### 4.4 **LEVELS AND FOUNDATIONS**

The foundations of the Works shall be carried down to depths as may be directed by the Engineer and they must be cut as nearly to the size of the concrete as possible and the vacant spaces between the concrete and the solid ground excepting where otherwise shown must be carefully filled in as directed by the Engineer.

All temporary timber shall be removed but should any timber be left in or should any other work be done beyond that specified; it will be at the Contractor's own cost.

#### 4.5 **MATERIALS GENERALLY**

All materials which have been damaged, contaminated or have deteriorated or do not comply in any way with the requirements of these Preambles shall be rejected and shall be removed immediately from the Site at the Contractor's own expense. No materials shall be stored or stacked on suspended floors without the Engineer's prior approval.

#### 4.6 **SAND**

Sand used for concrete shall be clean, well graded siliceous sand of good sharp hard quality equal to samples which shall be deposited with and approved by the Engineer. The sand shall be free from lumps of stone, earth, loam, dust, salt organic matter and other deleterious substances, sieved and washed with clean water unless directed otherwise by the Engineer.

#### 4.8 **AGGREGATE**

Aggregates shall conform with the requirement of B.S. 882 and all the proposed sources, types and grading test results of all aggregates are to be approved in all respects by the Engineer before work commences.

The grading of aggregates shall be one within the limits set out in B.S. 882 and as later specified and the grading, once approved, shall be adhered to throughout the Works and not varied without the approval of the Engineer. Fine aggregates shall be clean, coarse, siliceous sand of good, sharp, hard quality and shall be free from lumps of stone, earth, loam dust, salt, organic matter and any other deleterious substances. It shall be graded within the limits of Zone 1 and 2 of Table 2 of B.S. 882.

Coarse aggregate shall be good, hard, clean, approved blackstrap or similar stone, free from dust, decomposed stone, clay, weather matter, foreign substances or friable thin elongated or laminated pieces. It shall be graded within the limits of Table 1 of B.S. 882 for its respective nominal size.

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

Aggregate shall be delivered to the Site in their prescribed sizes or grading and shall be stockpiled on paved areas to boarded platforms in separate units to avoid intermixing.

#### 4.9 **WATER**

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

#### 4.10 **ADMIXTURES**

Before approval for the use of a proprietary admixture is given, the Contractor shall satisfy the Engineer as to its suitability for the work and its compatibility with the cement it is intended to complement.

#### 4.11 **EXPANSION JOINT FILLERS**

Expansion joints shall be provided where shown on the drawings or as directed by consultant. They shall be constructed with an initial gap between the adjoining parts of the works of the width specified in the drawings. The contractor shall ensure that no debris is allowed to enter expansion joints Expansion joints shall be provided as per drawings. Contractor shall ensure that expansion joints are made water-tight and that no leakage occurs through these joints for which he shall be responsible to redo at his own cost.

Expansion joint filler shall be as directed by the engineer

#### 4.12 **JOINT SEALANT**

Sealants shall be applied in accordance with the manufacturer's printed instructions and prices shall include for temporary battens or fillets and afterwards withdrawing to form groves as necessary.

On no account shall soft board materials be used as joint fillers.

#### 4.13 **CONCRETE MIXES**

All structural concrete shall consist of laboratory designed mixes. The weights of cement, fine, coarse aggregates and water to be used in the designed concrete mixes shall be those giving one cubic metre of mixed concrete. Each design mix (for each class of structural concrete) shall be submitted to the Engineer along with at least 8 laboratory test results (4 No. 7 days and 4 No. 28 days) for his approval. The design mixes and the accompanying test results shall be sent in their original form directly to the Engineer with a copy to the Contractor. No photocopies shall be accepted. Once approved these design mixes shall be used in preliminary stage of works.

Only the 28 day test results shall form the basis of assessment for the preliminary and works cube results but the Engineer may use the 7 day test results to determine the quality of concreting at his discretion.

#### 4.14 **STRUCTURAL CONCRETE STRENGTHS AT PRELIMINARY WORKS STAGE**

For the purpose of this Contract, Structural concrete shall mean concrete for which the specified characteristic cube strength is equal to or higher than 20N/mm<sup>2</sup>.

The concrete mix shall be designed to attain a mean strength greater than the characteristic strength by at least the current margin. The current margin shall be taken as the smaller of the value resulting from (1) or (2) below.

- 1) For at least 40 separate batches of concrete of identical proportions of similar materials produced over a period of between 5 days and 60 days using the same plant under similar supervision and procedures.

Current Margin = 1.64 times the standard deviation but no less than 7.5N/mm<sup>2</sup>.

- 2) For cube tests on at least 100 batches as described in (1) produced over a period not exceeding 12 months.

Current Margin = 1.64 times the standard deviation but not less than 3.75N/mm<sup>2</sup> for concrete grade 20 and above.

Where there is insufficient data to satisfy (1) and (2), the current margin for the initial mix design shall be taken as 10N/mm<sup>2</sup> until sufficient data is available.

Testing of concrete at preliminary stage shall continue until the Engineer is fully satisfied that the concrete mix has met all the requirements outlined in this section.

Structural concrete shall satisfy the above requirements for the characteristic strength at 28 days shown in the table below.

### **CONCRETE STRENGTHS IN (N/MM<sup>2</sup>)**

Age	Grade	Grade	Grade	Grade	Grade	Grade
	45	40	35	30	25	20
7 days	30.0	27.0	23.5	20.0	16.5	13.5
Characteristic strength at 28 days	45.0	40.0	35.0	30.0	25.0	20.0

The strength at 7 days shall only be indicative and unless the

Engineer otherwise agrees, it shall not form the basis of approval for design mixes.

#### 4.15 **CEMENT**

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

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

Class of Concrete Nominal Mix by Volume	15 1:3:6	10 1:4:8
Cubic metres of fine aggregate per 50 kg. bag of cement	0.12	0.16
Cubic metres of coarse aggregate per 50 kg bag of cement	0.24	0.32
Maximum size of coarse aggregate	40 mm*	40 mm*

#### 4.16 **WORK CUBE TESTS**

Work cubes are to be made at intervals as required by the Engineer and the Contractor shall provide a continuous record of the concrete work. The cubes shall be made in approved 100 or 150 mm moulds as required by the Engineer in strict accordance with the Code of Practice.

At least four cubes shall be made on each occasion, from different batches, the concrete being taken from the point of deposit.

Frequency of the tests and the number of samples required will be governed by the results of the previous tests, the quality of the materials revealed during the tests, and the uniformity of the quality. Should it become evident that the quality of the concrete is deteriorating the Engineer may require additional samples to be taken and test cubes to be made and tested to determine the cause.

Each cube shall be marked with a distinguishing number (numbers to run consecutively) and the date, and a record shall be kept on site giving the following particulars:

- a) Cube No.
- b) Date and time made
- c) Temperature and weather conditions
- d) Location in work
- e) 7-day Test

Date: .....

Strength: .....

- f) 28-day Test

Date: .....

Strength: .....

Cubes shall be forwarded, carriage paid to an approved Testing Laboratory in time to be tested two at 7 days and two at 28 days. No cube shall be dispatched within 3 days of casting.

Authentic copies of all Work Test results shall be forwarded to the Engineer directly from the testing laboratory and one shall be retained on the site. The test certificate shall indicate all properties as required by B.S. 1881.

If the strengths required above are not attained and maintained throughout the carrying out of the Contract, the Contractor will be required to increase the proportion of cement and/or substitute better aggregates so as to give concrete which does comply with the requirements of the contract. The Contractor may be required to remove and replace at his own cost any concrete which fails to attain the required strength as ascertained by Work Cube Test.

The Contractor must allow in his rates for concrete test cubes for all expenses in connection with the preparation and conveyance to the Testing Laboratory and testing of test cubes and no claim in respect of his failure to do so will be entertained.

4.17 **TRANSPORTING CONCRETE**

The concrete shall be mixed as near to the place where it is required as is practicable, and only as much as is required for a specified section of the work shall be mixed at one time, such section to be commenced and finished in one operation without delay.

All concrete must be efficiently handled and used in the Works within twenty (20) minutes of mixing. It shall be discharged from the mixer direct either into receptacles or barrows and shall be distributed by means which do not cause separation or otherwise impair the quality of the concrete.

Proper bridging arrangements for traffic over reinforcement shall be provided so that the reinforcement is not distorted, damaged or displaced

#### 4.18 **PLACING CONCRETE**

No concrete shall be placed before approval by the Engineer's representative.

Any accumulation of set concrete on the reinforcement shall be removed by wire brushing before further concrete is placed.

Care shall be taken that the concrete is not disturbed or subjected to vibrations and shocks during the setting period.

Mixing machines, platforms and barrows shall be clean before commencing mixing and be cleaned on every cessation of the work.

Where concrete is laid on hardcore or other absorbent materials, the base shall be suitable and sufficiently wetted before the concrete is deposited.

Concrete shall be placed from a height not exceeding 1.5 m directly into its permanent position and shall not be worked along the shutters to that position. Unless otherwise approved, concrete shall be placed in a single operation to the full thickness of slabs, beams and similar members, and shall be placed in horizontal layers not exceeding 1.5 m deep in walls and similar members.

Concrete in columns may be placed to a height of 4.0 m with careful placing and vibration and satisfactory results. Where the height of the column exceeds 4.0 m suitable openings must be left in the shutters so that this maximum lift is not exceeded. The bottom 500 mm must first be thoroughly compacted before more concrete is added as the vibrator is gradually withdrawn.

Concrete shall be placed continuously until completion of the part of the work between construction joints as specified hereinafter.

#### 4.19 **COMPACTION**

At all times during which concrete is being placed, the Contractor shall provide adequate trained and experienced labour to ensure that the concrete is compacted in the forms to the satisfaction of the Engineer.

The Contractor shall ensure that he has at least 30% backup/reserve capacity over and above the maximum expected demand.

Concrete shall not be placed at a rate greater than will permit satisfactory compaction nor to a depth greater than 450 mm before it is compacted.

During and immediately after placing, the concrete shall be thoroughly compacted by means of continuous vibration.

Care shall be taken to fill every part of the forms, to work the concrete under and around the reinforcement without displacing it and to avoid disturbing recently placed concrete which has begun to set.

Any water accumulating on the surface of newly placed concrete shall be removed and no further concrete shall be placed thereon until such water is removed. Internal vibrators shall have a frequency of not less than 7,000 cycles per minute and shall have a rotation eccentric weight of at least 0.75 kg with an eccentricity of not more than 15 mm. Such vibrators shall visibly affect the concrete within a radius of 250 mm from the vibrator.

#### 4.20 **CURING AND PROTECTION**

Care must be taken that no concrete is allowed to become prematurely dry and the fresh concrete must be carefully protected within two hours of placing from rain, sun and wind by means of at least three layers of Hessian sacking, white polythene sheeting, or other approved means. This protective layer and the concrete itself must be kept continuously wet for at least seven days after the concrete has been placed.

The Contractor must allow for the complete coverage of all fresh concrete for a period of 7 days. Hessian or white polythene sheeting shall be in the maximum widths obtainable and shall be secured against wind. The Contractor will not be permitted to use old cement bags, clear or any other colour polythene sheets, hessian or other material in small pieces.

Concrete in foundations and other underground work shall be protected from admixture with the falling earth after placing.

Traffic or loading must not be allowed on the concrete until the concrete is sufficiently matured, and in no case shall traffic or loading be of such magnitude as to cause deflection or other movement in the formwork or damage to the concrete members. Where directed by the Engineer props may be required to be left in position under slabs and other members for greater periods than those specified hereafter.

#### 4.21 **FAULTY CONCRETE**

Any concrete which fails to comply with these Preambles, or which shows signs of setting before it is placed shall be taken out and removed from the Site. Where concrete is found to be defective after it has set, the concrete shall be cut out and replaced in accordance with the Engineer's instructions. On no account shall any faulty, honeycombed, or otherwise defective concrete be repaired or patched until the Engineer has made inspection and issued instructions for the repair.

On the Engineer's instruction, the contractor shall cut out and replace any concrete in any part of the structure if in the Engineer's opinion:-

- a) The concrete does not conform to the specification, or
- b) Deleterious materials or materials which are likely to produce harmful effects have been included in the concrete, or

- c) The honeycombed or damaged surfaces are too extensive, or
- d) The finished concrete sizes are not in accordance with the drawings within permissible tolerances, or
- e) The setting-out is incorrect, or
- f) The steel cover has not been maintained, or
- g) The protection, including curing of the concrete during the construction was inadequate resulting in damage, or
- h) Undue deformation of or damage to the works has taken place due to inadequate shuttering or to premature traffic or to excessive loading, or
- i) Any combination of the above points has taken place resulting in unsatisfactory work. The whole of the cost, whatsoever (including time lost) which may be occasioned by the need to remove faulty concrete shall be borne by the Contractor

#### 4.22 **STEEL REINFORCEMENT**

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

Hot rolled M.S for the reinforcement of concrete	B.S. 4449
Hot rolled H.Y. steel for the reinforcement of concrete	B.S. 4449
Cold worked H.Y. steel for the reinforcement of concrete	B.S.4461
Hard drawn steel wire	B.S. 4482

#### 4.23 **STEEL REINFORCEMENT**

Generally high yield, hi-rib rebars (425 & 460 N/mm<sup>2</sup>) shall be used for main reinforcement and mild steel round bars, (250 N/mm<sup>2</sup>) for links and ductility for special elements where specified.

Reinforcement shall be stored on racks above ground level in covered waterproof sheds to keep away rain water. The sheds shall be well drained to prevent deterioration or contamination from any cause. All reinforcement shall be free from loose mill scale or rust, grease, paint or other substances likely to reduce the bond between the steel and concrete.

#### 4.24 **FABRIC REINFORCEMENT**

Fabric reinforcement shall be electrically cross-welded steel wire mesh reinforcement to B.S. 4483, and of the size and weight specified and made of wire to B.S. 4482.

#### 4.25 **FIXING STEEL REINFORCEMENT**

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

Reinforcement shall be accurately placed in position as shown on the drawings, and before and during concreting, shall be secured against displacement by using No. 18. S.W.G. annealed

binding wire or suitable clips at intersections, and shall be supported by concrete or metal supports, spacers or metal hangers to ensure the correct position and cover. No part of binding wire shall protrude into the specified nominal cover.

No concreting shall be commenced until the Engineer has inspected the reinforcement in position and until his approval has been obtained. The Contractor shall give two clear days' notice of his intention to concrete to the Engineer.

The Contractor is responsible for maintaining the reinforcement in its correct position, according to the drawings, before and during concreting. During concreting a competent steel fixer must be in attendance on the concretors to adjust and correct the positions of any reinforcement which may be displaced. The vibrators are not to come into contact with the reinforcement.

Where required to support and retain the reinforcement in its correct position, the Contractor shall provide templates, stools or other supports at his own cost.

Unless permitted by the Engineer, welding of bar reinforcement at intersections or for the joining of bars is prohibited.

The Contractor shall provide on-site facilities for cutting and bending reinforcement whether he is ordering his reinforcement bent or not and shall ensure that a token amount of straight bar of each diameter is available on site for bending as and when directed by the Engineer in order that minor modifications may be implemented on site without prior notice.

Bar bending schedules shall be issued to the Contractor at least a month in advance of the actual physical requirement in site. The Contractor is responsible for verifying that he has in his possession the required schedules to meet his programme and shall give the Engineer at least 3 weeks' notice for any schedules that he requires.

#### 4.26 **POSITION AND CORRECTNESS OF REINFORCEMENT**

The Contractor shall draw the Engineer's attention in good time if any discrepancies between details on drawings and bar bending schedules occur. Irrespective of whether any inspection and/or approval of the fixing of the reinforcement has been carried out as above, it shall be the Contractor's sole responsibility to ensure that the reinforcement complies with the details on the drawings or bending schedules and is fixed exactly in position shown therein and in position to give prescribed cover.

The Contractor will be held entirely responsible for any failing or defect in any portion of the reinforced concrete structure and including any consequent delay, claims, third party claims, etc., where it is shown that the reinforcement has been incorrectly positioned or is incorrect in size or quantity with respect to the detailed drawings or bending schedules.

#### 4.27 **SPACER BLOCKS**

Spacing blocks of approved size and shape made of concrete similar to that used in the surrounding construction and fixed to the reinforcement or formwork by No. 18 S.W.G. wires set into the spacer blocks or other approved means shall be provided where necessary to ensure that the requisite cover is obtained. The Contractor is to include for providing sufficient such spacer blocks in his prices for steel reinforcement where such supplier has been nominated.

#### 4.28 **FORMWORK**

The method and system of formwork which the contractor proposes to use shall be approved by the Engineer before construction commences. Formwork shall be substantially and rigidly constructed of timber, steel, plastic, precast concrete or other approved material.

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

#### 4.29 **CONSTRUCTION OF FORMWORK**

All formwork shall be of sufficient thickness and with joints close enough to prevent undue leakage of liquid from the concrete

and fixed to proper alignment, level and plumb and supported on sufficiently strong bearers, shores, braces, plates, etc, properly held together by bolts or other fastenings to prevent displacement, vibration or movement by the weight of materials, men and plant on same and so wedged and clamped as to permit easing and removal of the formwork without jarring the concrete. Where formwork is supported on previously constructed portions of the reinforced concrete structural frame, the contractor shall by consultation with the Engineer ensure that the supporting concrete structure is capable of carrying the load and/or sufficiently propped from lower floors or portions of the frame to permit the load to be temporarily carried during construction.

Soffits for beams and slabs of spans greater than 10 m shall be erected with an upward camber of 5 mm for each 3.0 m of horizontal span or as directed by the Engineer, without reducing the depth of the element.

Great care shall be taken to make and maintain all joints in the formwork as tight as possible, to prevent the leakage of grout during vibration.

All faulty joints shall be caulked to the Engineer's approval before concreting.

The formwork shall be sufficiently rigid to ensure that no distortion or bulging occurs under the effects of vibration. If at any time the formwork is insufficiently rigid or in any way defective the Contractor shall strengthen or improve such formwork as the Engineer may direct.

The Contractor's attention is drawn to the various surface textures and applied finishes required and the faces of formwork next to the concrete must be of such material and construction and be sufficiently true to provide a concrete surface which will in each particular case permit the specified surface treatment or applied finish.

All surfaces which will be in contact with concrete shall be oiled or greased to prevent adhesion of mortar. Oil or grease shall be of a non-staining mineral type applied as a thin film before the reinforcement is placed. Surplus moisture shall be removed from the forms prior to placing of the concrete. Great care shall be taken to avoid oiling or greasing the reinforcement.

Temporary openings shall be provided at the base of columns, wall and beam forms and at any other points where necessary to facilitate cleaning and inspection immediately before the pouring of concrete. Before the concrete is placed the shuttering shall be trued- up and any water accumulated therein shall be removed. All saw-dust, chips, nails and other debris shall be washed out or otherwise removed from within the formwork. The reinforcement shall then be inspected for accuracy of fixing. Immediately before placing the concrete the formwork shall be well wetted and inspection openings shall be closed. Cement slurry shall be applied to previously casted concrete as necessary to allow for adequate bonding. The erection, easing, striking and removing of all formwork must be done under the personal supervision of a competent foreman, and any damage occurring through faulty formwork or its incorrect removal shall be made good by the Contractor at his own expense.

After removal of formwork, all projections, fins, etc., on the concrete surface shall be chipped off, made good to the requirements of the Engineer. Any voids or honeycombing shall be treated as described under "Faulty Concrete".

4.30 **STRIPPING FORMWORK**

All formwork shall be removed without undue vibration or shock and without damage to the Concrete. No formwork shall be removed without the prior consent of the Engineer. The Contractor shall notify the Engineer of his intended removal of any formwork at least two days in advance. The minimum periods that shall elapse between the placing of the concrete and the striking of the formwork will be as follows:

Beam sides, wall and columns (unloaded)	2 days
Slab soffits (props left under)	3 days
Beam soffites (props left under)	7 days
Removal of props to: (partly subject to 7 days concrete cube strength being satisfactory)	
Slabs	10 days
Beams	14 days
Cantilever beams and slabs	28 days

4.31 **STRIPPING FORMWORK**

In continuous spanning slabs or beams, no span shall be de-propped until the adjoining spans have been cast and cured for the specified periods.

Stripping and re-propping will not be permitted. The striking times indicated herein are for normal conditions and shall be adjusted if:

- a) The span of the structural member under consideration exceeds 6.0 m for beam. An additional period of one day for each 500 mm of additional span shall then be allowed

- b) The dead load of the structural member under consideration forms a large proportion of the total design load.
- c) The setting of the concrete has been retarded for any reason.
- d) Any combination of the above points and other consideration which would call for such a precaution to be taken.

In any case, props shall be left in place in the lower two consecutive floors over which construction loads are expected to be supported.

#### 4.32 **EXPANSION JOINTS IN CONCRETE SURFACE BEDS**

Expansion joints shall be positioned and constructed as shown on the drawings. The joints in the surface beds shall be absolutely square and true to line and position.

All joints in surface beds shall be formed to the patterns and shapes to coincide exactly with the joints in the surface finish or as otherwise indicated on the drawings. Formwork shall be manufactured from steel of heavy angle section and be to the Engineer's approval. The Contractor shall submit drawings of the forms he intends to use and obtain the Engineer's approval before fabrication. Panels shall be poured in alternate bays as agreed with the Engineer. No construction joints other than those indicated on the Drawings shall be submitted.

#### 4.33 **SITE BOOKS AND STANDARDS**

##### **Instructions to be recorded**

The Contractor shall provide and keep permanently on the site a numbered triplicate book wherein the Contractor shall record all instructions relating to concrete work issued by the Engineer or the Engineer's representative. One copy of every entry therein shall be sent to the Engineer on the same day as the entry is made.

##### **Site Diary**

The Contractor shall provide and keep permanently on the site a continuous entry diary wherein the Contractor shall record details of shuttering, placing of reinforcement, concreting and curing operations, striking of shuttering, making good and daily temperature and weather conditions. This diary shall always be available for inspection by the Engineer's representative.

## **PART 5: WALLING**

### **MATERIALS**

#### 5.1 **CEMENT**

Cement used for making mortar shall be as described in "Concrete work".

#### 5.2 **LIME**

The lime for making mortar shall be obtained from an approved source and shall comply with B.S. 890 Class A for non-hydraulic lime. The lime to be run to putty in an approved lined pit or container. The water to be first run into the pit or container and the lime to be added until it is completely submerged, stirred vigorously until all lumps are disintegrated and shall be kept

constantly covered with water and regularly stirred for at least four weeks. The resulting milk-lime then to be run through a fine sieve and run into a pit or other container and kept clean and moist for not less than two weeks before being used in the works.

### 5.3 **SAND**

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

### 5.4 **WATER**

Shall be as described in "Concrete Work".

### 5.5 **CONCRETE BLOCKS**

Concrete blocks shall comply with the requirements of B.S. 2028, 1384 except where amended or extended by the following clause. Blocks shall have square arises and corners. For fair-faced work damage to arise and corners shall not exceed the removal of 6 mm of the blocks depth or thickness.

Concrete blocks shall have a minimum crushing strength of 3.5 N/mm<sup>2</sup> except when below the damp course level or in contact with soil when they shall have a minimum crushing strength of 7N/mm<sup>2</sup>, unless noted otherwise on drawings. Hollow concrete blocks shall not be used below the damp course level or in contact with soil.

### 5.6 **STONE**

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

Unless otherwise noted, all masonry walls shall be coursed squared rubble walling with mortar joints.

The size of stones for rubble walling shall be such that the length of stone does not exceed three times its height. For course squared rubble walls blocks shall not exceed 300 mm in height and shall be not less than 150 mm in height.

Where snecked rubble walls are specified, the snecks shall not be less than 100 mm square on the exposed face.

Stone for masonry shall have a minimum compressive strength of 10 N/mm<sup>2</sup>. (Stone shall not be required to be tested to failure). The density of stone for masonry shall be not less than 230 kg/m<sup>3</sup>

The drying shrinkage of stone shall not exceed 0.05%.

Samples of stone provided for testing shall be tested for the following in accordance with the methods given in B.S. 2028, 1364 and the test results shall comply with the requirements of

this specification.

- a) Compressive strength
- b) Density
- c) Drying shrinkage

The colour and texture of stone shall be uniform and consistent. Prior to delivering any stone to site, the Contractor shall supply the Architect with a sample of stone in order that he may approve the colour and texture. The Contractor shall ensure that sufficient suitable stone is available for the whole of the project prior to ordering the stone.

Where cast stone including stone described as artificial stone, reconstructed stone, etc is specified the stone shall comply with the requirements of B.S. 1217.

Masonry shall be of stone, having no irregular faces and only the back face if not visible shall be left as from the saw.

Prior to ordering dry stone the Contractor shall demonstrate that the stone is durable. This may be done by supplying details of buildings constructed with stone from the same quarry and which has been exposed to the same environmental condition for at least ten years.

The maximum projection from the face of stone for rubble walls shall be 20 mm beyond the specified face of the wall.

The Contractor shall provide six samples of stone measuring 150 mm x 150 mm for testing prior to delivering any stone to site. As work proceeds the Contractor shall provide six samples 150 mm x 150 mm x 150 mm for testing from every 300 m<sup>2</sup> of work.

All stone shall be stacked on prepared dry area free of clinker, ashes and sulphate bearing strata.

#### 5.7 **WALL REINFORCEMENT**

Where described walls and partitions shall be reinforced with a 25 mm wide strip of No. 20 S.W.G. hoop iron built into alternate horizontal joints in the wall centre. The reinforcement shall be lapped and hooked at running joints, angles and intersections and carried at least 115 mm into abutting walls at junctions.

#### 5.8 **WALL TIES**

To be 3 mm diameter galvanized mild steel wire twisted butterfly wall ties.

#### 5.9 **DAMP-PROOF COURSES**

The bituminous felt sheeting for damp-proof courses shall be hessian based bituminous felt complying with B.S. 743 type 4A weighing not less than 3.85 kgs per square metres. The sheeting is to be lapped 150 mm at running joints and the full width of walls at angles.

#### 5.10 **BUILDING WALLING**

##### a) **Laying and Jointing**

All blocks shall be well wetted before being laid and the top of walling where left off shall be well wetted before commencing building. Walls to be kept wet three days after

building. All walls throughout the works shall be carried up evenly in 200 mm courses except where courses of less depth are required to bring walling up to level of floors, windows and the like and where otherwise described, no part being allowed to be carried up more than one metre higher at one time than any other part and in such cases the joining shall be made in long steps so as to prevent cracks arising and all walls shall be levelled round at each stage. Not more than 3 metre height of wall shall be laid in any one day.

Blocks shall be bedded and jointed in cement mortar as described with beds and joints 10 mm thick, all flushed up and grouted solid as the work proceeds.

c) **Curing**

All walls shall be maintained in a damp condition for at least 24 hours after laying. Walls under construction shall be dampened by applying water with a brush and no hosing directly on to the wall shall be permitted. When work ceases on any section of wall polythene or hessian shall be draped over the wall for at least 24 hours. If hessian is used, it shall be maintained continuously wet.

## **PART 6: ROOFING**

### **6.1 CORRUGATED GALVANIZED IRON (CGI) SHEETING**

Galvanized mild steel corrugated sheeting (GCI) shall be in accordance with B.S 3083, not less than 0.56 mm (24swg) with sheets free from twist or buckle. Galvanizing must be clean, free from surface defects, and firmly bonded to the steel. Ridges, valleys, flushings and the like, of the same profile and quality with the roofing sheets shall be provided.

Galvanized mild steel ridges and valleys shall be not less than 0.56 mm (24swg) thick, of a profile to suit the specified construction, and not less than 300 mm wide.

Fixings must be of a size and pattern to suit the roof and the sheets being fixed and must be approved by the sheet manufacturer. Bolts, screws and nails must be supplied complete with plastic washers. All fixing bolts and screws must be fitted with approved plastic washers for the profile of the sheeting in use. Steel hook bolts and nuts shall comply with B.S 1494. Cadmium or zinc plated steel roofing screws shall comply with B.S 1494, galvanized and gimlet pointed.

Roofing sheets and accessories shall be fixed in accordance with the manufacturer's recommendations to make the whole system sound and watertight.

Sheeting shall be laid with end laps of not less than 150 mm and one and a half corrugation side laps. Sheets shall be laid with open joint side laps to face away from the prevailing wind.

Eaves and end laps shall be fixed with two fixings per sheet width. Fixing at intermediate supports, where no lap occurs, shall be with one fixing per sheet width.

## 6.2 **P.V.C RAINWATER PIPES**

P.V.C rainwater pipes and fittings are to comply with B.S 4576 with rubber ring seal joints. Pipes are to be fixed to the structure with P.V.C holder bats or brackets built-in or plugged and screwed at maximum 2 metre centres.

Bends, swan necks, discharge chutes and fittings generally are to be fixed where necessary to facilitate the flow of water.

Rainwater outlets shall be PVC suitable for the roof finish in which they occur with domical PVC grating.

## 6.3 **COMPLETION OF THE WORKS**

On completion of the works, the Contractor shall clear away, ensure that rainwater outlets are clear and generally leave the roof area in a clean and watertight condition to the satisfaction of the Architect.

## 6.4 **PROTECTION**

The Contractor is to take all necessary precaution to protect the finished works and must ensure that no damage occurs to the footing until completion of the works.

# **PART 7: CARPENTRY AND JOINERY**

## 7.1 **GENERAL**

All woodwork shall be carried out in accordance with the drawings and the principles of first-class joinery construction. Unless specifically stated otherwise, sizes shown on drawings are finished sizes and the Contractor must allow for wrot faces.

### **MATERIALS**

## 7.2 **QUALITIES OF TIMBER**

- a) The qualities of timber stated hereinafter are in accordance with the latest KENYA Government Grading Rules.
- b) All timber described as Prime Grade is to be First Grade (Grade II).
- c) All timber described as Selected Grade is to be Second Grade (Grade II).
- d) All hardwood is to be Prime Grade (Grade I).
- e) All timber for permanent work in the building shall before use be approved by the Architect for quality in accordance with the foregoing specification for its respective grade. Any timber not so approved by the Architect shall be removed from the site forthwith.

### **7.3 INSECT DAMAGE**

All timber, whether graded or ungraded and including shuttering, scaffolding and the like shall be free of live borer, beetle or other insect attack when brought upon the site. The Contractor shall be responsible up to the end of the maintenance period for executing at his own cost all work necessary to eradicate insect attack of timber which becomes evident including the replacement of timbers attacked, or suspected of being attacked, notwithstanding that the timber concerned may have been inspected and passed as fit for use.

### **7.4 SEASONING OF TIMBER**

All carpentry timbers are to be seasoned to an average moisture content of not more than 20%. All joinery timbers are to be seasoned to an average moisture content of not more than 15%. The Contractor is to make available on site a meter for testing moisture content of all timber delivered.

### **7.5 PREPARATION AND PROTECTION OF TIMBER**

- i) All timber necessary for the works is to be purchased immediately the contract is signed and when delivered is  
  
to be open-stacked for such further seasoning as may be necessary. Preparation of the timber is to be commenced simultaneously with the commencement of the works generally.
- ii) All timber and assembled woodwork is to be protected from the weather and stored in such a way as to prevent attack by decay, fungi, termites or other insects.

### **7.6 SPECIES OF TIMBER**

Only those timbers specified are to be used for the works, unless alternatives are authorized by the Architect in writing.

### **7.7 HARDWOOD**

All hardwood will comply with the requirements of B.S. 1186 Part 1 and B.S. 4047. It shall show a straight and regular grain throughout.

Hardwood shall be free from woolly texture, soft heart, sap wood, splits, shakes, all evidence of insect or fungi attack and rot and all faults caused by compression failure. There shall be no waney edges. Hardwood shall be free from knots on exposed faces. Any hardwood showing visible imperfections will be rejected.

Preservatives shall not be used without the Architect's permission. Where indicated on the drawings, internal hardwoods will be treated with clear sealants as specified elsewhere.

## **7.8 FLUSH DOORS**

Generally, the requirement for flush doors is that they have a minimum thickness of 40 mm. They shall be faced both sides and there will be hardwood lippings to all edges. Hollow core and semi-solid types shall contain adequate provision within the core for ironmongery (e.g. lock blocks etc).

All hollow and semi-solid door shall be faced with WEP bonded Exterior grade plywood. Except where indicated, doors shall have hardwood veneered faces.

Vision panels where required shall be 150 mm wide x 900 mm deep.

Flush doors shall be obtained from a supplier to be approved by the Architect. Flush doors shall comply with the requirements of B.S. 459 Part 1, 2 and 3. All edges shall be lipped with hardwood tongued into the edge of the door.

The core of solid core flush doors shall be constructed of longitudinal laminations of precision planed timber, butt jointed and glued with resin based adhesive under hydraulic pressure, the whole forming a rigid fire-resistant raft.

Where doors are indicated as fire resistant they shall be constructed so as to exceed the requirements stated when tested in accordance with B.S. 476 Part 8 (1972) Section 7.

## **PART 8: STRUCTURAL STEEL-WORK**

### **8.1 APPROVED SUB-CONTRACTOR**

The whole of the structural steelwork is to be executed by a specialist sub-contractor who is to specifically be approved by the Engineer and the Contractor and will be required to make arrangements for the execution of this work and bear all expenses incurred. No change in the rates inserted by the Contractor in these Bills of Quantities will be allowed.

### **8.2 ARCHITECT/ENGINEER**

For the purpose of the steel structure, the Structural Engineer shall be deemed vested with the duties of and be the representative of the Architect.

### **8.3 QUALITY OF MATERIAL AND WORKMANSHIP**

The quality of all materials and workmanship used in the execution of the works shall comply with the requirements of current relevant British Standards and Codes of Practice, including all the amendments

#### 8.4 **BRITISH STANDARDS AND CODES OF PRACTICE**

B.S 4360	Weld able Structural Steels
B.S 449	The use of Structural Steel in Building, (incorporating B.S Code of Practice C.P 113 including Addendum No. 1)
B.S 4 (Part 1)	Hot rolled sections
B.S 4 (Part 2)	Hot rolled hollow sections
B.S 938	General requirements for the metal arc welding of Structural Steel Tubes to B.S 1717, (B.S 938 will be considered to apply to the requirements for welding of hot rolled hollow sections to B.S 4 Part 2).
B.S 1775	Steel tubes for Mechanical, Structural and General Engineering Purposes
B.S 1856	General requirements for the metal arc welding of Mild Steel
B.S 639	Covered Electrodes for the metal arc welding of Mild Steel
B.S 2008	Protection of Iron and Steel Structured from Corrosion.

#### 8.5 **FABRICATION**

The standard of work and the general procedure to be followed during fabrication shall be in accordance with B.S 449. The Contractor must ascertain all dimensions on site prior to commencement of fabrication.

- a) **Cutting & Bending:** All members, plates, brackets etc. shall be neatly and accurately sheared, sawn or profiled to the required shape as shown on the drawings. Where steel is oxy-cut to shape, care shall be taken to preserve the full finished sizes required.  
If members or plates are bent or set, the bends or sets shall be correctly made to the radii or angles specified without leaving hammer marks. The materials may be heated to permit this. Material that has been heated should be annealed to approval.
  
- b) **Punching & Drilling:** Holes for black bolts shall be drilled or punched 2 mm larger in diameter than the bolt size. Holes for high tensile friction grip bolts shall be drilled or sub punched and reamed to 2 mm larger in diameter than the specified bolt size. All drilled holes shall be parallel sides and shall be drilled by axle of holes perpendicular to the surfaces. Badly drilled holes shall either be reamed out to approval and larger bolts fitted or otherwise as directed. All rough arises shall be ground off. Holes for bolts in material thicker than 15 mm must be drilled. When holes are drilled in one operation through two or more thickness of material, the parts shall be separated after drilling and all burrs (rough edges) removed before assembly. Holes for bolts shall not be formed by a gas cutting process. Holes formed or enlarged by oxy-cutting will not be accepted and must be filled to approval by electric welding and re-filling.

- c) **Bolting:** All bolts used shall be of such length that at least one thread is exposed beyond the nut after the nut has been tightened. Where a nut or bolt head would bear on an inclined surface, a beveled washer of the correct shape shall be interposed between the two surfaces. Beveled washers shall not be allowed to get out of position during fabrication and erection and for this purpose may be spot welded to the steel surface.

**Bolting:**

Beveled washers for use with high tensile bolts shall not be welded.

**i. Black Bolts, Nuts and Washers**

Black bolts shall comply with the requirements of B.S 916. (B.S.W Threads) or B.S 2708 (U.N.C. Threads) as appropriate.

**ii. Close Tolerance Bolts**

Close tolerance bolts shall conform to B.S 916 or B.S 2708

**iii. High Tensile Bolts**

High tensile bolts shall conform to B.S 1768.

**iv. High Strength Friction Grip Bolts**

a) General grade bolts to B.S 3139 Part 1

b) Load indicating bolts manufactured by G.K.N Ltd. Or any other approved manufacturer.

c) High tensile bolts to B.S 1768.

**v. Rawl Bolts**

Rawl bolts shall be those manufactured by Rawl plug Company Ltd. or any other approved manufacturer.

**vi. Washers**

Plain and tapered washers o B.S 3410.

Spring washers to B.S 1802

Washers for high strength friction grip bolts shall be appropriate to the type and quality of bolt specified.

**vii. Rivets**

The steel used for rivets shall be in accordance with B.S 4360 and in the case of high tensile steel rivets shall be so manufactured so that they can be driven and the heads formed and the physical properties not impaired.

**viii. Pressed Steel Sections**

Pressed or cold rolled steel purlins and girders shall be to the sizes indicated on the drawings and shall be formed from approved steel strip with minimum yield strength of 175 N/mm<sup>2</sup>.

#### **ix. Pressed Steel Sections**

The sections shall be manufactured straight and free from twist. The tolerance away from straightness shall not be greater than 2 mm for every 2000 mm in length along any folded edge.

#### **x. Electric Welding**

All welding shall be carried out in strict accordance with the requirements of B.S 1856 and B.S 2624 as appropriate and electrodes shall comply with B.S 639.

Fusion faces shall be free from irregularities such as tears, fins, etc. which would interfere with the deposition of weld metal.

Fusion faces shall be smooth and uniform and shall be free from loose scale, slag, rust, grease, paint and other deleterious material.

All welds shall be of approved type and finished size as specified. Welding shall be carried out in such sequence that results in minimum distortion of the welded parts.

Preparation of edges for welding shall be carried out by planing or machine flame cutting. Manual flame cutting will not be permitted.

Parts to be welded shall be maintained in their correct relative positions during welding, preferably by jigs.

Multi- run welds shall be carried out with each run closely following the previous run but allowing sufficient time for the proper removal of slag.

The Contractor shall ensure that each run is inspected and any unsatisfactory weld cut and remade to approval.

Welds in material 25 mm or greater in thickness shall be made by the Argon arc or similar approved process and special precautions shall be taken to prevent weld cracking.

Unless otherwise stated, the minimum size of fillet shall be 6 mm.

On completion, welds shall present a smooth and regular finish. Weld metal shall be solid throughout with complete fusion between weld metal and parent metal and between successful runs throughout the joint.

Defects shall be cut out and made good to approval in sound weld metal.

The external faces of butt welds are to be ground smooth on completion to the approval of the Engineer.

#### **(a) Structural Hollow Sections**

Hollow sections shall be connected by electric welding unless specified otherwise.

The designs of welds shall be in accordance with Clauses 53 and 54 and Appendix of B.S 449.

Butt welds in tension members shall not be permitted unless the prior approval of the

Engineer in writing has first been obtained.

Butt welds where permitted shall be made with the fusion surfaces of the ends of each member properly prepared and the member properly aligned.

## 8.6 **ASSEMBLY**

### a) **Trusses and Portal Frames**

Trusses and portal frames shall be carefully set out to the dimensions shown in the drawings.

Where it is required that trusses be cambered, such camber shall be provided by bending the bottom chord to an arc of a circle.

Notwithstanding any dimensioned spacing of purlin cleats, the Contractor shall ensure that purlin cleat spacing is satisfactory for the available stock lengths of roof sheeting. However, the Engineer's approval must first be obtained before any alteration is made in purlin spacing or sheeting sizes.

Splices in portal and other frames shall be made where shown on the details or where directed by the Engineer.

### a) **Boxed Members**

Abutting edges of boxed members shall be connected and sealed with a continuous weld to exclude the entrance of moisture. Where specified, such welds shall be ground flush, to approval.

### b) **Shop Assembly**

Assembly of the units in the shop prior to transporting to the Site must be inspected by the Engineer prior to painting. The assembled work shall be laid out in the shop or yard such that all parts are accessible for inspection or testing.

The Contractor shall furnish all facilities for inspection and testing of the works and must notify the Engineer on every occasion materials are ready for inspection.

### c) **Marking**

All members of the structures to be site assembled shall be marked in accordance with the site details and marking plans submitted to the Engineer for approval.

## 8.9 **ERECTION**

### a) **Site Dimensions**

Erection shall not commence unless and until accurate site dimensions have been taken by the Contractor. No claims will be considered should site dimensions differ from those on the drawings. Any modifications in the structural steel required in order to comply with site dimensions shall be made on the ground to the Engineer's approval before erection is commenced.

### b) **Safety**

All erection shall be carried out by competent and experienced personnel and the

Contractor shall take every care to safeguard members of the public, workmen and adjoining property against injury and/or damage. The Contractor shall be held responsible for all damage caused to the structure, workmen or other property during erection.

All gear used shall be adequate strength and shall comply with all current regulations.

During erection, the work shall at all times be adequately bolted, guyed and/or braced to make the structure secure.

c) **Storage and Handling**

Steel members shall be stored, handled and erected in such a manner that no member shall be subjected to excessive stresses which could have adverse effects on the properties of the steel. If, in the opinion of the Engineer, the steelwork has been subjected to such treatment, the Contractor shall remove the member from site and replace it at his own expense.

d) **Erection Notes**

No member or part of a member which has been bent or distorted shall be erected in that condition. All straightening shall be done on the ground.

Stanchions shall be wedged to line and level on steel or cast iron wedges and checked by the Engineer. After acceptance, stanchion bases shall be grouted to approval before wedges are removed. Unless otherwise shown on the drawing, all stanchions shall be left truly vertical and correct to line and level. Beams, girders, etc. shall be erected level, unless otherwise shown, and correctly positioned.

Trusses and open web joists shall be carefully handled at all times and during erection shall be lifted at such points and in such a manner that will preclude any possibility of damage from excessive stresses.

Packing plates, shims, washers or similar adjusting pieces found necessary to accommodate tolerance in structural site dimensions shall be provided and fixed to the approval of the Engineer.

Immediately after erection, each truss shall be made secure by purlins, bracing or guys to the approval of the Engineer. Bracing shall be fixed in position as soon as dependent portion of the work is completed.

e) **Tightening and Testing High Tensile Friction Grip Bolt**

Before assembly, the contact surfaces, including those adjacent to the washers, shall be descaled and be free from dirt, oil, loose scale, burrs, paint (except priming paint), pits and other defects that would prevent proper seating of the parts.

Bolts shall be fixed with approved hardened flat or tapered washers as required between the bolt and nut and the softer mild steel.

When bearing faces of the bolted part have a slope of more than 1 in 20 with respect to a plane normal to the bolt axis, square smooth beveled washers shall be used to compensate for the lack of parallelism.

All bolts shall be tightened by the 'Turn of Nut' method. This method shall generally be specified in B.S 3259 and as approved by the Engineer to achieve a minimum tension equal to the roof load.

e) **Grouting**

Unless otherwise detailed on the drawing, a space of not less than 40 mm shall be provided between undersides of column base plates and footings and between beams and roof truss bearings and concrete pads.

After each column, beam or roof truss has been wedged up to a line and level and fixed in position to approval, the space between footing and pad and underside of column base plate or steel member shall be grouted with a mixture of one part of Portland cement and one part of approved washed sand (1:1)

The Portland Cement and sand shall be thoroughly mixed together with sufficient water to produce a mixture of damp earth consistency and shall be used within 20 minutes of mixing. The caulking mixture shall be packed tightly into the space between base plate and foundation and protected from damage until it sets.

## 8.10 **PAINTING**

a) **Paints**

All paints are to be obtained from suppliers approved in writing by the Engineer.

Paints are to be delivered to the site or to the Contractor's fabrication site in the original containers as supplied by the manufacturer with seals unbroken and are to be used in strict accordance with the manufacturer's specifications.

Manufacturer's representatives are to be free to visit the site and inspect the materials for laboratory analysis.

Paints are not to be thinned unless instructed by the Engineer. No external painting is to be carried out during rain or when rain is likely to occur before the paint has had time to dry. All surfaces are to be dry and free from moisture during painting.

b) **Preparation for Painting**

All structural steel shall be thoroughly scraped and wire brushed to remove mill scale and rust. Dirt, grease and oil shall be washed off with white spirit and the steel allowed to dry.

c) **Application**

A first coat of Red Lead Graphite Primer or other approved primer shall be applied after fabrication of the works has been completed. A minimum of 24 hours shall elapse before the steel is moved from its position before the painting has been completed.

After delivery to site the steel shall be carefully examined and all areas where the priming coat has been damaged and/or where rust has developed shall be washed with white spirit and wire brushed as necessary and a further priming coat as for the first coat applied to completely cover the damaged areas.

During erection, surfaces of steel which are to be in contact shall be painted with one further coat of primer as previously described and the surfaces brought together whilst the paint is wet.

After erection, paint a second and finishing coat of 'Oil Company Aluminium Paint 360/36' or other finishing paint of standard as for steelwork. Welds shall not be painted over until they have been deslagged, inspected and approved.

8.11 **PRICES, MEASUREMENTS AND PAYMENTS**

Prices quoted by the Contractor shall be based on the calculated weights of steel and shall include for manufacture, painting and supply, all as described in the Bills of Quantities, specified and shown on the drawings, including the cost of delivery to the site or other agreed place or places and the supply of all bolts, rivets plugs, gussets, cleats, to complete the erection of the works.

Prices shall include for erection, (all labour, scaffolding and other erection equipment necessary) and cover the cost of additional prime coat painting as previously specified. The prices shall also include for lining up, levelling and plumbing but not for grouting up of the bases.

**PART 9: METALWORK MATERIALS**

9.1 **GENERALLY**

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

9.2 **MILD STEEL**

Mild steel shall comply with B.S 15

9.3 **HOLLOW SECTION TUBING**

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

#### 9.4 **BOLTS, NUTS AND WASHERS**

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

#### 9.5 **GALVANIZED SHEET METAL**

To be No. 24 SWG of approved manufacture to B.S 2989 of best quality mild steel sheets cold rolled close annealed patent, flattened and hot dipped galvanized.

#### **WORKMANSHIP**

#### 9.6 **WELDING**

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

Fusion faces shall be free from irregularities which could interfere with the welding material. These faces shall also be free from any deleterious material such as rust, grease and paint.

All welds shall be of the specified finish sizes and the sequence of the welding shall be carried out in a manner that will give minimum distortion to the welded parts.

Edges of all welding parts will be maintained in their correct position.

Welds shall be carried out with each run closely following the one prior with sufficient time between to allow for removal of slag.

Each run of weld is to be inspected and the sub-contractor shall ensure that unsatisfactory welds are cut out or remade to the required standard.

The minimum size of filled weld shall be 6 mm.

All completed welds shall have a regular and smooth surface. The weld material shall be solid with complete fusion throughout the weld and to the faircut metals.

Any defects shall be cut out or made good to approval. External faces of butt welds to be ground smooth.

#### 9.7 **PAINTING**

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

#### 9.8 **FIXING OF STEEL WINDOWS**

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

## **PART 10: FINISHES**

### **10.1 PREPARATION OF SURFACES FOR PLASTER ETC.**

Irregularities in the surfaces to be plastered or rendered shall be filled with mortar, without lime, twenty four hours before plastering is commenced. Joints in blockwork, etc. are to be well raked out before plastering to form a good key. Smooth concrete surfaces to be plastered shall be treated with an approved proprietary bonding agent or hacked to provide an adequate key for the plaster.

All surfaces to be plastered or rendered shall be clean and free from dust, loose mortar and all traces of salts.

All surfaces shall be thoroughly sprayed with water and all free water allowed to disappear before plaster is applied.

As far as practical, plastering shall not be commenced until all mechanical and electrical services, conduits, pipes and fixtures have been installed.

Before plastering is commenced all junctions between differing materials shall be reinforced. This shall apply where walls join columns and beams, particularly where flush and similar situations where cracks are likely to develop and as directed by the Architect. The reinforcement shall consist of a strip of galvanized wire mesh 'Expamet' or equal approved 15 cm wide which shall be plugged, nailed or stapled as required at intervals not exceeding 45 mm at both edges. The surfaces to which such mesh shall be applied shall be painted with one coat bituminous paint prior to fixing the mesh.

### **10.2 APPLICATION OF PLASTER AND RENDER**

After preparation of the surfaces a key coat of cement slurry shall be applied to the wetted surface to be plastered. When this coat is dry the plaster coat shall be applied, by means of a trowel, between screeds laid, ruled and plumbed as necessary. This coat which shall be to the required thickness shall be allowed to set hard and then cured as described.

Surfaces are to be finished with a wood or steel float to a smooth flat surface free from all marks.

Tyrolean finish shall be applied with an approved machine to give a finish of even texture and thickness. The sprayed finish shall be applied in two separate coats allowing time for drying between coats.

Application in one continuous operation to build up a thick layer will not be permitted. The total finished thickness of the two sprayed coats shall be not less than 7 mm. The sprayed finish shall not be applied until all repairs and making good to the undercoat are completed. Any plaster which adheres to pipes, doors, windows and the like shall be carefully removed before it has set. Curing shall take place after the application of the second coat. The finished surface shall be wither 'rough textured' or 'Pressed' finish as directed by the Architect. Where coloured tyrolean is required this shall be obtained by the addition to the mix of an approved colour pigment.

### **10.3 APPLICATION OF PLASTER AND RENDER**

All plastering and rendering shall be executed in a neat workmanlike manner. All faces except circular work shall be true and flat and angles shall be straight and level or plumb. Plastering shall be neatly made good around pipes or fittings. Angles shall be rounded to 7 mm radius.

All tools, implements, vessels and surfaces shall be at all times kept scrupulously clean and strict

precautions shall be taken to prevent the plaster or other materials from being contaminated by pieces of partially set material which would tend to retard or accelerate the setting time.

#### 10.4 **CURING OF PLASTER**

Each coat of plaster is to be maintained in a moist condition for at least three days after it has developed enough strength not to be damaged by water.

#### 10.5 **ANGLE BEADS**

Where required by the Architect, salient external angles of plastered walls shall be protected with galvanized mild steel angle beads complying with B.S. 1247 profile C3.

They shall be securely plugged, nailed or stapled as required at intervals not exceeding 450 mm at both edges.

#### 10.6 **PLASTER STOPS**

Where shown on details, plasterwork shall be stopped against "Expamet" galvanized steel plaster stop, reference 575 which shall be securely nailed to walls in the positions indicated on the drawings.

Stops shall be neatly and closely fitted together at corners and it is important that they are secured to walls through all holes provided.

#### 10.7 **CEMENT AND SAND SCREEDS**

Screeds shall be mixed and formed as described. TERRAZZO screeded finish shall have a minimum of 25mm thickness and gravel size and colour shall be approved by PM.

#### 10.8 **SURFACE HARDENERS**

Floor hardeners shall comprise an approved type guaranteed by the makers to produce a hard dense concrete with high abrasive resistance, impervious to the penetration of heavy oils, acid or alkali solutions and to be used strictly in accordance with the maker's instructions.

The first dressing of sodium silicate for granolithic flooring shall be one part of sodium silicate to six parts of water by volume.

Subsequent dressings shall be composed of one part of sodium silicate to four parts of water by volume, for all surface. The two liquids shall be well mixed together, sprayed over the flooring and spread evenly with a mop or soft brush, any excess being wiped off and the flooring allowed to dry for at least 24 hours after each dressing. After final drying floors shall be washed with clean water

#### 10.9 **CERAMIC TILES**

Ceramic tiles shall be:

- a) 6 mm Thick
- b) Fixed in accordance with Code of Practice CP 202: 1972 and AMD 3271 June 1980.

## 10.10 PRECAST CONCRETE BLOCKS FLUSH CHANNELS

To be all in accordance with B.S. 378. The slabs are to be of the sizes given herein and bedded, jointed and pointed in cement lime mortar (1:2:9).

## **PART 11: GLAZING**

### MATERIALS

#### 11.1 GENERAL

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

#### 11.2 STANDARDS

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

### MATERIALS

#### 11.3 PUTTY

- a) The putty for glazing to wood sashes is to be linseed oil putty all as B.S 544.
- b) The putty for glazing to metal windows is to be gold size metal window putty specially designed for tropical use, or patent mastic putty if approved by the Architect.
- c) All putty shall be delivered on site in the original manufacturer's sealed cans or drums and used direct therefrom with the addition only of pure linseed oil necessary. No mineral or other oils may be used in the putty except genuine linseed oil.

#### 11.4 MIRRORS

Mirrors shall be polished float glass silvering quality protected at back with electro – copper backing coated with Shellac varnish and paint. The mirrors are to be fixed with chromium plated dome headed mirror screws with plastic or rubber distance pieces and washers unless otherwise stated and rates shall include for this.

### WORKMANSHIP

#### 11.5 GENERAL

Glazing of all types and in all locations shall be carefully executed by artisans skilled in this type of work and in conformance with the recommendations of CP

152. Glazing shall be carefully fitted so that it is not subject pressure and stresses imposed by being an oversized fit within the framing.

#### 11.6 MEASUREMENTS

Each element (door, window, etc.) to receive glass shall be accurately measured to ensure a perfect fit subsequently.

#### 11.7 **SINGLE GLAZING**

Single glazing shall be executed with glass of the various types described herein. Ordinary (non-safety) glass may be pre-cut or cut on site.

#### 11.8 **WIRED GLASS**

Wired glass shall be cut so that the wires embedded are truly vertical and horizontal (i.e. at right angles to the cut edges).

#### 11.9 **SAFETY GLASS**

Safety glass shall be factory cut before delivery to site. Site cutting will not be permitted.

#### 11.10 **STORAGE AND HANDLING**

Glass shall be delivered to site in stout containers and clearly marked. The containers shall incorporate sling attachment points for lifting bridles. Glass shall be stored under cover so that the panes are truly vertical.

#### 11.11 **PROTECTION**

After fixing, glass shall be boldly marked with paper or whitewash so that it is clearly visible. In positions where damage due to construction traffic or activity is likely to occur, stout screens composed of hardboard or fibre board on battens shall be arranged to protect the glass.

#### 11.12 **DAMAGE**

Should any glass delivered to site be found to be damaged, it shall not be incorporated into the works without the express permission of the Architect. Should glazing installed be damaged for any reason, it shall be removed and replaced free of charge to the satisfaction of the Architect. Should any adjacent works be damaged, this shall equally be reinstated free of charge to the satisfaction of the Architect.

#### 11.13 **DEFECTIVE WORK**

All glass shall be checked before installation to ensure that defective glass is not installed. Notwithstanding that, if in the opinion of the Architect any installed glazing is defective, it shall be removed and replaced free of charge to the satisfaction of the Architect.

#### 11.14 **GLAZING TO WOOD**

Glazing shall be secured to wood framing with hardwood beads. Edges shall be wrapped in wash leather so that the wash leather finishes just below the surface of the bead. No adhesives shall be used.

#### 11.15 **GLAZING TO METAL**

Glazing shall be secured to metal framing with clip-in butyl rubber gaskets.

#### 11.16 **GLASS THICKNESS**

Glass thickness shall conform to the recommendations of CP 152 and the manufacturer's recommendations for sizes of panes relative to the position in the building and the effects of wind pressure (both positive and negative)

### 11.17 **CLEANING**

All window glazed panels and mirrors shall be cleaned both inside and outside immediately prior to handing over of the building to the satisfaction of the Architect.

## **PART I2: PAINTING AND DECORATING MATERIALS**

### 12.1 **MANUFACTURERS**

Except where stated all materials shall be obtained from approved manufacturers. The Contractor shall state the name and address of the manufacturer whose materials he proposes to use. Once approval has been given the Contractor shall not obtain materials from other sources without the prior written agreement of the Architect.

### 12.2 **GENERAL**

Each succeeding coat of priming, undercoating and finishing (pigment) or clear coating shall be sufficiently different in colour as to be readily distinguishable.

All primers and paint in one system upon a particular surface shall be obtained from the same manufacturer.

The mixing of paints, etc. of different brands before or during application will not be permitted.

### 12.3 **EMULSION PAINTS**

Emulsion paints shall be matt or satin finish vinyl emulsion paint.

The first (mist) coat shall be thinned in accordance with the manufacturer's instructions.

### 12.4 **GLOSS PAINT**

Gloss paints shall be hard gloss finish oil paint.

### 12.5 **LEAD BASED PAINTS**

The use of lead based paints will not be permitted.

### 12.6 **CLEAR FINISHES**

Clear finishes internally shall be clear polyurethane varnish (one pack)

### 12.7 **PRIMERS AND UNDERCOATS**

Unless otherwise specified, primers and undercoats shall be of the type recommended by the manufacturer of the finishing coats specified for a particular surface. Primer for external bare metalwork surfaces shall comply with B.S 2523.

### 12.8 **KNOTTING**

Shellac knotting shall comply with B.S 1336

#### 12.9 **WHITE SPIRIT**

The white spirit shall comply with B.S 245.

#### 12.10 **TIMBER STAIN**

Timber stain shall be oil based pigmented stain. The application of this material shall be strictly in accordance with the manufacturers written instructions. Tint and degree of application shall be to the approval of the Architect.

#### 12.11 **STOPPING**

The stopping shall be as follows:

- a) Plaster work shall be plaster based filler.
- b) Concrete and brickwork shall be similar material to the background and finished in a similar texture.
- c) Internal woodwork, plywood and block board shall be putty complying with B.S 544.
  - d) External woodwork shall be white lead paste complying with B.S 2029.
  - e) Internal clear wood finishes: the stopping shall be that recommended by the lacquer manufacturer.

#### 12.12 **FILLERS**

The fillers for internal joinery shall be the type recommended by the paint manufacturer for use with this type of paint or lacquer.

Stoppers and fillers shall be tinted to match the undercoat, and shall be compatible with both undercoats and primers.

All materials shall be used strictly in accordance with the manufacturer's instructions.

#### 12.13 **TEXTURED COATING**

Textured coating is to be of proprietary manufacture approved by the Architect, of an approved colour.

Technical information concerning the coating is to be submitted to the Architect before ordering but the minimum qualities of the coating are to be as follows:

- f) Suitable for application internally and externally to plastered, rendered, concrete, block, stone, brick, asbestos and timber surfaces.
- g) Minimum durability of 10 years even in exposed surfaces.
- h) Maintenance fee.
- i) Built-in mould resistant fungicide.

## **WORKMANSHIP**

### **12.14 GENERAL**

Workmanship generally shall be carried out in accordance with CP 231, unless otherwise specified.

Before painting is commenced, floors shall be swept and washed over, surfaces to be painted shall be cleaned before applying paint as specified and all precautions taken to keep down dust whilst work is in progress.

No paint shall be applied to surfaces structurally or superficially damp, and all surfaces must be ascertained to be free from condensation, efflorescence, etc. before the application of each coat.

No painting shall be carried out externally during humid, rainy, damp, foggy or freezing conditions where surfaces have attained excessively high temperatures or during dust storms.

No new, primed or undercoated woodwork and metalwork shall be left in an exposed or unsuitable situation for an undue period before completing the process.

No dilution of paint materials shall be allowed except strictly as detailed by the manufacturer's own direction, either on the containers or their literature, with the special permission of the Architect. For external work, dilution of paints will not be allowed whatsoever. For internal work, where permitted by the Architect, undercoats may be thinned by the addition of not more than 5% thinners. Gloss finish shall not be thinned at all.

Metal fittings such as ironmongery etc. not required to be painted shall first be fitted and then removed before the preparatory processes are commenced. When all painting is completed, the fittings shall be cleaned as necessary and re-fixed in position.

### **12.15 BRUSHWORK**

Unless otherwise specified, all primers and paints shall be brush applied. Written permission must be obtained from the Architect if an alternative method of application is to be used.

### **12.16 STOPPING AND FILLING**

Unless otherwise specified by the manufacturer, all primers and undercoats shall be stopped flush and rubbed down to a smooth surface with an abrasive paper and all dust removed before each succeeding coat is applied. Care shall be taken to avoid burnishing (make shine) of the surface.

### **12.17 STIRRING**

Unless otherwise stated by the paint manufacturer, all paint materials shall be thoroughly mixed and/or stirred before and during use and suitably strained as and when necessary.

### **12.18 INSPECTION**

No priming coats shall be applied until the surfaces have been inspected and the preparatory work has been approved by the Architect. No undercoats or finishing coats shall be applied

until the previous coat has been similarly inspected and approved.

#### 12.19 **PAINT APPLICATION**

Each coat of paint shall be so applied as to produce a film of uniform thickness. All paint shall be applied in accordance with the manufacturer's instructions. Special attention shall be given to ensure that all surfaces including edges, corners, crevices, welds and rivets receive a film thickness equivalent to that of adjacent painted surfaces.

#### 12.20 **DRYING**

All coats shall be thoroughly dried before succeeding coats are applied. Allow a minimum of 24 hours between applications on any one surface, unless otherwise stated by the manufacturer.

#### 12.21 **COLOURS**

The colours will be selected by the Architect from the paint manufacturer's standard colour range.

#### 12.22 **TOXIC WASH**

Concrete, block work, plaster and timber surfaces which are to be painted shall be washed down prior to painting with a toxic wash applied by brush or spray. A second wash shall be applied two days after the first wash. The surfaces shall be allowed to dry out completely before application of paint.

#### 12.23 **PROTECTION**

Proper care must be taken to protect surfaces while still wet by use of screens and wet paint signs where necessary.

#### 12.24 **DAMAGE**

Care must be taken when preparing surfaces, or painting etc. not to stain or damage other work. Dust sheets and covers to the satisfaction of the Architect shall be used to protect adjacent work. Any such stains or damage shall be removed and made good at the Contractor's expense.

#### 12.25 **CLEANLINESS**

All brushes, tools, pails, kettles and equipment shall be clean and free from foreign matter. They shall be thoroughly cleaned after use and before being used for different colours, types or classes of material. Painting shall not be carried out in the vicinity of other operations that may cause dust. Waste liquids, oil soaked rags etc. shall be removed from the building each day. Waste liquids shall not be thrown down in any sanitary fittings or drains.

#### 12.26 **PERFORMANCE**

If, while the work is in progress, the paint appears to be faulty, such as consistency of colour, drying time, or quality of finish, the work shall be stopped at once and the manufacturer consulted.

The manufacturers of the materials shall be given every facility for inspecting the work during progress in order to ascertain that the materials are being used in accordance with their directions, and to take samples of their products from the site if they so desire for tests.

The finishing coats of the various paints or surface finishing shall be free from sags, brush marks, runs, wrinkling, dust, bare or starved patches, variations in colour and texture, and other blemishes.

When the work has been completed, the finished surfaces shall not be inferior in quality. Colour and finish to the samples approved by the Architect and imperfections in manufacture shall not be apparent through these finished surfaces.

12.27 **VINYL EMULSION PAINT**

Surfaces to be painted shall receive one mist coat followed by two final coats of vinyl emulsion paint.

12.28 **GLOSS FINISH PAINT**

Surfaces to be painted shall be primed then painted with two undercoats followed by one coat gloss finish paint.

**PART 13: CIVIL WORKS SITE CLEARANCE**

13.1 **CLEARING SITE**

The Contractor shall remove buildings, walls, gates, fences, advertisement and other structures and obstructions, grub up and remove trees, hedges bushes and shrubs and clear the site of the works at such time and to the extent required by the Engineer, but not otherwise, the materials so obtained shall so far as suitable be reserved and stacked for further use; all rubbish and material unsuitable for use shall be destroyed or removed from the site.

Where top soil has to be excavated, this shall be removed and stacked on site. After completion of construction, it shall be spread over the disturbed ground, any surplus being disposed of as directed by the Engineer.

13.2 **VEGETATION**

No allowance will be made for the cutting and removal of crops, grass weeds and similar vegetation. The cost of all such work will be held to be included in the rates entered in the Bills of Quantities for excavation.

13.3 **BUSHES AND SMALL TREES**

All bushes and small trees, the main stem of which is less than 600 mm girth at 1 metre above ground level shall be uprooted (unless otherwise directed by the Engineer) and burnt or otherwise disposed of as directed by the Engineer.

13.4 **HEDGES**

Where directed by the Engineer, hedges shall be uprooted and disposed of by burning.

13.5 **FELLING TREES**

Where shown on the drawings or directed by the Engineer, trees shall be uprooted or cut down as near to ground level as is possible. No trees shall be cut down without the express permission of the Engineer.

## **PART 14: PARTICULAR PLUMBING AND DRAINAGE WORKS SPECIFICATIONS**

### **14.1 GENERAL**

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

### **14.2 SANITARY APPLIANCES**

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

### **14.3 PPR PIPEWORK**

PP-R pipe work up to 63mm nominal bore shall be manufactured in accordance with the current European standards i.e. DIN 8077 and DIN 8078 for PN 20 tubing, with metallic joints to DIN 8076, joints and fittings for tubing to DIN 16962. All threaded inserts in the fittings and joints shall be made of nickel brass OT58 and are turned from bars and manufactured in accordance with DVGW 534E.

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

### **14.4 MuPVC DRAINAGE PIPING**

The Sub-contractor shall supply and fix MuPVC soil pipes and fittings as indicated on the Drawings and Schedules. Pipes and fittings shall be in accordance with relevant British Standards, including B.S. 4514 and fixed to the manufacturer's instructions and B.S. 5572.

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

Connections to WC pans shall be effected by the use of a WC connector, gasket and cover, fixed to suit pan outlet. Suitable supporting brackets and pipe clips shall be provided at maximum of one metre centres.

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

### **14.5 MIRRORS**

Mirrors shall be polished float glass silvering quality protected at back with electro – copper backing coated with Shellac varnish and paint. The mirrors are to be fixed with chromium plated dome headed mirror screws with plastic or rubber distance pieces and washers unless otherwise stated and rates shall include for this.

#### 14.6 **ELECTRIC SHOWER**

Instant electric shower head heater with embedded rod type sheathed element. Electrically insulated with electronic temperature control complete with wide rose and overflow to withstand a working pressure of up to 400Kpa. It shall have a heating capacity of about 5.5kw and complete with extension shower arm and 4mm<sup>2</sup> electric supply cable to neon lit DP switch.

#### 14.7 **STORAGE TANK**

The **specifications for double later plastic tanks** typically include:

- **Construction:** The tanks are designed as upright, double wall, flat bottom storage tank assemblies, consisting of a cylindrical inner primary tank and an octagonal outer secondary tank, both made from seamless polyethylene.

**Capacity:** Capacities range from **550 gallons (2082 L) to 12,500 gallons (47,313 L)**, depending on the design and application.

**Material Properties:** The tanks are made from virgin polyethylene resin, with specific requirements for cross-linking and UV stabilizers.

**Design Features:** The design includes provisions to prevent rainwater entry and allows for seismic retention, with a minimum capacity to hold **115% of the primary tank's fill capacity**.

**Standards Compliance:** The tanks must comply with various standards, including ASTM, UBC, and IBC codes, ensuring safety and reliability in chemical storage

#### 14.8 **BOOSTER PUMP FOR WATER SPECIFICATIONS**

When selecting a booster pump for water, consider the following specifications to ensure optimal performance and reliability:

**Flowrate:** The maximum achievable rate of volume discharge through the pump.

**Pressure Boost:** The maximum pressure addition to the existing pressure or head of the system.

**Horsepower:** The power rating required to meet the application's demands.

**Power Rating:** The power rating of the pump motor.

**Type:** Centrifugal pumps are commonly used for booster systems.

**Design:** Multi-stage pumps are typically used for high-pressure applications.

**Material:** Pumps should be constructed from durable materials like stainless steel or galvanized steel.

**Control:** Adjustable or variable speed pumps allow for flow adjustment during operation.

**Safety Features:** Self-priming pumps create a vacuum level to draw fluid into the inlet without external assistance

**Efficiency:** High efficiency is crucial for reducing energy costs and maintaining pressure levels

## **PART 15: PARTICULAR SPECIFICATIONS FOR PORTABLE FIRE EXTINGUISHER**

### **15.1 GENERAL**

The particular specification details the requirements for the supply and installation and commissioning of the Portable Fire Extinguishers and Boosted Hose Reel System. The Sub-contractor shall include for all appurtenances and appliances not necessarily called for in this specification or shown on the contract drawings but which are necessary for the completion and satisfactory functioning of the works.

### **15.2 PORTABLE CARBON DIOXIDE FIRE EXTINGUISHERS**

These shall be portable carbon dioxide fire extinguishers and shall comply with B.S. EN 3/BS 1449 and B.S. 1004. The body of extinguisher shall be a seamless steel cylinder manufactured to one of the following British Standards; B.S. 401 or B.S. 1288. The filling ratio shall comply with B.S. 5355 with valve fittings for compressed gas cylinders to B.S.341. Where a hose is fitted it shall be flexible and have a minimum working pressure of 206.85 bar (3000 p.s.i.).

The hose is not to be under internal pressure until the extinguisher is operated. The nozzle shall be manufactured of brass gunmetal, aluminium or stainless steel and may be fitted with a suitable valve for temporarily stopping the discharge if such means are not incorporated in the operating head.

The discharge horn shall be designed and constructed so as to direct the discharge and limit the entrainment of air.

### **15.3 WATER/CO<sub>2</sub> EXTINGUISHERS**

These shall be 9-litre water filled CO<sub>2</sub> cartridge operated portable fire extinguishers and shall comply with B.S. EN 3/BS 1449 and to the requirements of B.S.1004. Unless manufactured with stainless steel, bodies shall have all internal surfaces completely coated with either a lead tin, lead alloy or zinc applied by hot dipping. There shall be no visibly uncoated areas.

### **15.4 DRY CHEMICAL POWDER PORTABLE FIRE EXTINGUISHER**

The portable dry powder fire extinguishers shall comply with BS EN 3/BS 1449 and BS 1004. The body shall be constructed to steel not less than the requirements of BS 1449 or aluminium to BS 1470: 1972 and shall be suitably protected against corrosion. The dry powder charge shall be non-toxic and retain its free flowing properties under normal storage conditions.

Any pressurizing agent used as an expellant shall be in dry state; in particular compressed air. The discharge tube and gas tube if either is fitted shall be made of steel, brass, copper or other not less suitable material. Where a hose is provided it shall not exceed 1,060mm and shall be acid and alkali resistant. Provision shall be made for securing the nozzle when not in use.

### **15.5 FIRE BLANKET**

The fire blanket shall be made from cloth woven with pre-asbestos yarn or any other fire proof material and to measure 1800 x 1210 mm and shall be fitted with special tapes folded so as to offer instantaneous single action to release blanket from storing jacket to BS 1721.

#### 15.6 **HOSE REEL**

The hose reel to the installation shall consist of a recessed, swing-type hose reel as Angus Fire Armour Model III or from other approved manufacturers. The hose reel shall comply with B.S. 5274: 1975 and B.S 3161: 1970 and is to be installed to the requirements of C.P. 5306 Part 1: 1976. The hose reel shall be supplied and installed complete with a first-aid non-kinking hose 30 meters long with a nylon spray / jet / shut-off nozzle fitted. A screw down chrome - plated globe valve to B.S 1010 to the inlet to the reel is to be supplied. The orifice to the nozzle is to be not less than 4.8mm to maintain a minimum flow of 0.4 lit / sec to jet. The hose reels shall be installed at 1.5 meters centre above the finished floor level in locations shown in the contract drawings.

#### 15.7 **PIPE WORK**

The pipe work for the hose reel installation shall be galvanized wrought steel tubing heavy grade Class C to B.S 1387: 1967 with pipe threads to B.S 21.

#### 15.8 **PIPE FITTINGS**

The pipe fittings shall be wrought steel pipe fittings, welded or seamless fittings conforming to B.S. 1740 or malleable iron fittings to B.S 143. All changes in direction will be with standard bends or long radius fittings. No elbows will be provided.

#### 15.9 **GATE VALVES**

The gate valves up to and including 80mm diameter shall be non-rising stem and wedge disc to B.S 5154: 1974 with screwed threads to B.S. 21 tapes thread

#### 15.10 **FINISH PAINTING**

Upon completion of testing and commissioning the hose reel installation, the pipe work shall be primed and finish painted with 2 No. coats of paints to the Engineer's requirements.

#### 15.11 **TESTING AND COMMISSIONING**

The hose reel installation shall be flushed out before testing to ensure that no builder's debris has entered the system. The installation is to be then tested to one and half times the working pressure of the installation to the approval of the Engineer. Simulated fault conditions of the pumping equipment are to be carried out before acceptance of the System by the Engineer.

15.12 Provide for bacterial enzymes starter material.

15.13 Provide and fix 600x450mm medium duty manhole covers and frames; all to approval

15.14 Provide material and construct manholes with all necessary 100mm pipes and connection medium duty manhole covers and frames including all necessary excavations, formwork, backfilling and disposal of surplus material; all to approval.

#### 15.15 **MANUAL ALARM BELL**

Supply, installation, testing, and commissioning of manual alarm bell system for fire alarm or

emergency notification purposes in compliance with local fire safety regulations and building codes and conform to B.S 5839 (Fire detection and fire alarm systems for buildings). Installation, siting, cabling, testing and commissioning shall fully comply with the requirements of BS 5839-1, including audibility, zoning, labeling, inspection, and certification upon completion.

#### 15.16 **FIRE NOTICES**

Provide and fix fire safety notices in full compliance with BS 5839-1 and relevant fire safety regulations, manufactured from durable, non-combustible, weather-resistant material with clear, permanent lettering. Notices shall clearly display standard instructions such as “Fire Alarm – Break Glass”, “Fire Action Notice”, and emergency procedures using approved symbols and contrasting colors for maximum visibility. They shall be securely mounted at conspicuous and accessible locations, particularly adjacent to manual call points, exits, and alarm devices, at heights recommended by the standard. The scope shall include supply, fixing, and final inspection to ensure legibility, correct positioning, and conformity with the Engineer’s and fire authority’s approval.

### **PART 16: GENERAL SPECIFICATION FOR ELECTRICAL MATERIALS AND WORKS**

#### 16.1 **GENERAL CLAUSES**

##### **Regulations**

This specification covers the requirements of lighting and power installation in Kenya. All apparatus and materials supplied and all work carried out shall comply with the following:

-

- (a) The Kenya Power & Lighting Company Ltd.
- (b) Local Statutory Regulations
- (c) The Current edition of the Regulations for the electrical equipment of building issued by the Institution of Electrical Engineers of Great Britain which should be used as “Code of Practice” except where they conflict with Kenya Government legislation regarding electrical installations and local amendments.

##### **Standards**

Except where otherwise indicated in this Specification, the Contract Works and all manufactured items shall comply with the relevant Specifications of the British Standards Institution and, as much as possible, the Kenya Bureau of Standards. Such specifications are herein after referred to as “BS” and KEBS respectively. In each case the latest editions of such specification shall apply.

Should it be desired to offer equipment covered by other National or International Standards,

the approval of the Project Manager must be obtained in writing, before completion of the tender documents.

### **Record Drawings**

The Contractor shall mark accurately on one set of drawings the conduit laid during the progress of the work. This information must be made available on site for inspection by the Project Manager.

At the completion of the contract, the contractor shall supply the Project Manager with one set of transparent originals, and two complete sets of prints showing the complete installation. The drawings shall include the location of all apparatus, conduits and cable routes, and a schematic diagram of mains distribution indicating the phasing of the system.

#### **16.2 M.V. MINIATURE CIRCUIT BREAKERS**

All distribution boards shall be supplied with M.C.B.'s manufactured to BS. 3871 and of a rating as specified on the drawings. The circuit breakers shall incorporate both thermal overload and magnetic short circuit tripping, with a trip free-mechanism.

Three phase circuits shall be controlled by integrally manufactured three pole breakers, with one common operating lever. An intertripping mechanism shall ensure isolation of all three poles in the event of an overload or short circuit on one phase.

#### **16.3 L.V EARTH LEAKAGE CIRCUIT BREAKERS**

If specified or indicated on the Contract drawings, the use of E.L.C.B. for isolation of incoming supply in the distribution board, it shall be of an approved type for flush mounting.

The general requirements of the E.L.C.B. are as follows: -

- (a) It shall be high sensitivity i.e. it shall operate in 30 milliseconds for a leakage current of 30 milliampere.
- (b) Its operation shall not relay on the mains for tripping under fault conditions. For example, in the event of leakage from the live to earth conductor occurring at the same time as a break in the neutral supply wire, the breaker shall trip.

#### **16.4 LABELLING**

A circuit chart with each board shall show the name, location and current loading of each circuit connected. Each board shall be fitted with an engraved identification label in black and white, such as: Distribution Board D.I." etc, and all three phase boards shall be labelled on white or red," DANGER 415 VOLTS"

#### **16.5 NON-METALLIC CONDUIT**

All non-metallic conduits shall be class "A" heavy gauge, high impact, P.V.C complying with

BS 4606 part 2, type AH.

The minimum size to be used on the Contract is 20mm external diameter. All conduit installations shall be concealed in the walls and floors of in structural slabs.

#### 16.6 **JOINTS**

Conduits will be joined and terminated utilizing the appropriate rigid P.V.C. compounds as detailed below, or standard conduit entry electrical equipment. Jointing will conform to one of f the following techniques:

No. 1: - Permanent Adhesives - The solvent cement supplied by the conduit manufacturers will be used to produce a rigid sealed connection.

No. 2: - Flexible Adhesive - A non-hardening adhesive supplied by the conduit manufacturers will be used to produce a flexible sealed joint where allowance is necessary for longitudinal movement (e.g. expansion couplers).

#### 16.7 **BENDS**

Bends and sets in the conduit will be made in accordance with manufacturer's instructions. The radius of the bend shall not be less than 2.5 times outside diameter of the conduit, or such greater radius which will facilitate easy drawing in of cables.

#### 16.8 **EXPANSION**

Adequate allowance shall be made for longitudinal expansion and contraction of the conduit under normal working temperature variations as follows:

- (a) Expansion couplers should be used in straight runs exceeding 6 meters with a loose or flexible type joint, (5.02, No. 2 above) at the long spout end of the coupler.
- (b) Saddles as supplied by the manufacturers shall include a sliding support tolerance for longitudinal expansion.
- (c) Special consideration may need to be given to the fixing of accessories where this may prevent natural conduit movements. Oversize or slotted fixing holes may be necessary or introduction of expansion couplers.

#### 16.9 **SUPPORT**

Conduit should be supported by saddles at not less than 900mm intervals. Where working temperature tend to be high this should be reduced to 600mm.

#### 16.10 **CONDUIT BOXES AND FITTINGS**

- (a) All conduit boxes shall be circular or square pattern of Rigid P.V.C. suitable for plain connections conforming to sheet 62 BS. 4607 part 2. Boxes for supporting a fitting or accessory shall be fitted with a P.V.C. lid held in position by means of two 2BA round headed screws. Boxes shall have metallic screwed inserts.
- (b) Circular or square boxes shall be provided at all outlet points, unless otherwise specified and lighting fittings, ceiling switched and other accessories will be screwed to the internal lugs of the boxes.

Care must always be taken when considering the raise of totally enclosed fitting with P.V.C. circular boxes where the temperature within the box is likely to raise above 60 C (140<sup>0</sup>F) special steel insert clips should be used in conjunction with circular boxes where this problem can arise and also in situations where heavy pendants are used.

- (c) Looping in Boxes of circular P.V.C. pattern to sheet 63 BS. 4607 part 2 may be used in such work as dictated by the structure of the buildings. Conduit entry shall be made by means of P.V.C. socket adapters and P.V.C. bushes.
- (d) Adaptable boxes shall be of moulded or fabricated P.V.C of square or oblong shape complete with P.V.C. lids secured by 2 BA brass or Steel Plated round-headed screws. All adaptable boxes and lids of the same size shall be interchangeable. No adaptable box smaller than 75mm x 50mm or larger than 300mm x 300mm shall be employed. Boxes shall be of adequate depth in relation to the size of conduit entering them.
- (e) Conduits shall be terminated at adaptable boxes; fuse boards, switches, sockets or other equipment not possessing push-in or threaded spouts, by means of appropriate size female adapter and P.V.C. Hexagonal heads Bare Bush. All cemented joints to be made to depth of not less than the diameter of the conduit being used.

#### 16.11 **EARTH CONTINUITY**

Earth continuity shall be provided by a separate insulated conductor drawn into the plastic conduit and rated in accordance with circuit loadings and appropriate regulations, or as mentioned on the drawings.

Where required under the regulations, an earth continuity conductor shall be provided for lighting fittings in which case the control switches shall be equipped with an appropriate earth terminal.

#### 16.12 **ARRANGEMENT OF CONDUIT LAYOUT**

The conduit system shall be carefully planned and erected to avoid all unnecessary bends or changes in direction. Conduits shall be laid in straight horizontal or vertical lines with easy sets. Where several conduits follow similar routes, they shall be neatly grouped in multiple runs. Where multiple runs change direction, the radii of the sets shall be laid out from a common centre.

Where draw-in boxes for right angled change of direction are required in multiple runs, adaptable boxes shall be used for such sizes as to allow all conduits to enter the box without sets, where conduits are concealed or laid on structural floors, they shall be secured by a fixed method to be approved by the Project Manager. Where it is essential the conduits cross one another in floors, the chases shall be deepened and the conduits set to create the minimum desirable diversion.

Care shall be taken to ensure that there is no obstruction to cables within the conduits caused by the ingress of plaster, concrete, or other matter. Conduit ends must be cut square and cleaned of burrs.

#### 16.13 **ERECTION**

Conduit for each circuit shall be completely erected before any cable is drawn in. Adequate drawn-in points shall be provided.

Straight runs shall have draw-in facilities at distance not exceeding 12 meters. Runs incorporating sets or bends shall have drawn-in facilities at a distance not exceeding 9 meters. These distances may need to be reduced in difficult situations or with particular cable complexes.

Not more than four easy sets, or two tight angle bends or sets may be installed between draw-in points. Solid elbows or tees shall not be accepted.

#### 16.14 **M.V.& L.V. FINAL SUB-CIRCUIT WIRING**

All M.V. and L.V power and lighting wiring cables shall be 600/1000 volt grade, single core, P.V.C insulated, with stranded copper conductors, manufactured in accordance with BA. 6004.

The minimum sizes on lighting circuits shall be 1.5 sq. mm. Sizes on power spur circuits shall be 4.0 sq.mm. and on ring main circuits 2.5 sq. mm.

#### 16.15 **INSTALLATION**

Cables forming sub-circuits connected to different sub-distribution board shall not be drawn into the same conduit or drawn-in box.

The cables shall be coloured in accordance with Table B4 of IEE Regulations. Cables used on

extra low voltage circuits shall have distinctive colours other than these colours.

No reduction of the strands forming the conductors shall be allowed at switch or other terminals, but all strands shall be effectively secured by screws, nuts and washers or other approved means.

Cables shall be joined together at the terminals of ceiling boxes and other accessories. Under no circumstances will joints be permitted in the run of the cable.

#### 16.16 **P.V.C. INSULATED M.V.ARMoured CABLES**

These shall be 500/1000V grade to BS 6346 or BS. 6004 having copper conductors of plain copper wire P.V.C insulated, P.V.C sheathed single wire armored and P.V.C. sheathed overall.

The cores of four cables shall be distinctively coloured red, yellow, blue and black.

The Contractor shall provide suitable glands and accessories for all armored cable terminations and where cables are suspended shall provide the necessary cables trays, rack cleats or hanger supports and fixings.

Cable supports and ranks shall be made by a recognized manufacturer and shall be to the approval of the Project Manager.

All supports and ranks shall be arranged as far as is practicable for the easy removal of any single cable in multi-cable run, without threading cables through supports and racks.

The number of types of supports and racks shall be kept to a minimum commensurate with meeting the requirement of the contract works.

#### 16.17 **LAYING OF CABLES**

The work of excavating and back-filling of all trenches for cables, is included in this sub-contract and the responsibility for positioning, width and depth of trenches, and for laying and bedding of all cables and protective covers is included with the Electrical Works covered by this Specification.

For H.V. and M.V. cables in open ground 0.75m

For H.V. and M.V. cables in under roads and Pavements 0.85m

Where more than one cable is laid in a trench, cables shall be spaced as follows:

Between H.V. cables 0.2m

Between M.V. cables 0.1m

Between M.V. cables and telephone cables 1.2m

Between M.V. and telephone cables 0.4m

Between H.V. and M.V. cables 0.8m

Between H.V. and M.V. cables 0.4m

Between L.V. and telephone cables	0.4m
Between L.V. cables	0.1m

In straight run trenches, cables crossings shall not be permitted except where cables branch from the main run.

At every draw-in point, joint or junction box, the cable should be snaked.

Boxes cables are laid, the bottom of the trench shall be evenly graded and cleared of all loose stones, and shall then be covered with an 80mm layer of sand or sifted soil and lightly compacted, and a further 80mm layer shall be placed on top of the cables.

The approved cables protection, clause 5.03, shall then be laid and trench refilled with excavated materials in 0.2m layers, each layer being well compacted by hand or mechanical punners before the next layer is filled.

The width of the trench shall be such that a clearance of 80mm shall be provided between outermost cable and the side of the trench.

Where cables are disposed in more than one layer, the vertical spacing shall be 0.4m between centres of cables or cable groups, the depth other the trench being made suitable accordingly.

Stones or other hard objects shall not be included in any of the back filling materials.

16.18     **PROTECTIVE COVERS**

The protective covers, manufactured in accordance with BS.2484 shall be provided over cables laid in the ground, each complete with an interlocking device to prevent lateral displacement.

These protective covers shall extend at least 50mm either side laterally beyond the outside of the outer cable in each group of cables so protected.

16.19     **CABLE POSITION MARKERS**

These should be placed adjacent to all points where cables change direction, and all intervals of not more than 30m and at other positions designed by the D.R or the Project Manager.

They shall be manufactured in accordance with the relevant contract drawings and to the approval of the Project Manager.

16.20     **SEALING OF CABLE ENTRIES**

Where cables enter buildings, pipes, or ducts, the mouths of the pipes or duct shall be effectively impregnated wooden plugs and a mixture of compound and transformer oil, or any approved manner.

All cables passing through interior walls or floors shall be effectively sealed to the approval of the Project Manager by means of asbestos cement after the cables have been pulled through, in order to prevent the accumulation of moisture and the ingress of debris, sand or vermin.

The cost of sealing the cables shall be included in the rates for erection and laying.

16.21 **PROTECTION AGAINST MECHANICAL DAMAGE**

All cables located in such positions where they are vulnerable to damage by mechanical or other means shall be protected by suitable lengths of steel pipe bushed to prevent damage to the cable.

16.22 **RATING PLATES**

Each cable when completely erected shall have permanently attached to it at each end, and in such intermediate positions as may be considered necessary by the Project Manager, metal plates upon which is engraved, or stamped, the identification number of cable together with the voltage, size and make-up, and the service which it supplies.

This information shall be recorded by the Contractor so that it may appear on drawings of the completed installation.

16.23 **CABLE JOINTING**

The Contractor shall be wholly responsible for sealing and jointing of all cables supplied and erected under the contract.

The cable boxes, looping-boxes and glands for H.V., M.V. and L.V cables on all items of equipment shall be provided under the contract.

Sealing and jointing shall be in accordance with the best current practices and of first class workmanship. Where cable armoring is used as earth continuity conductors, the glands shall have the necessary contact surface or straps to provide a low resistance path under fault conditions.

The tender shall include for cable jointing where appropriate and also all labor, jointing materials and compound, together with the use of all jointers tools and making of the cable tails to the apparatus terminals.

Generally, cable terminations on switchgear, transformers, join boxes, outgoing and incoming circuits on the switchboards shall be glanded in an approved manner.

16.24 **SOCKETS OUTLETS**

In all areas, general power outlets shall be of the 13 Amp. 3 pin fused plug type complying with BS 1363. They shall be flush pattern, with white or ivory cover plates unless otherwise specified on the drawings. Where the circuits are supplied from a common feed, two outlets shall from a twin unit in a common box.

The Earthing terminal of every socket outlet shall be connected to the earth continuity conductor of the final sub-circuit by an appropriately sized insulated copper conductor. Unless otherwise stated they shall be mounted at 300mm above the finished floor level.

16.25 **PLUGS**

One fused plug top shall be supplied for each socket outlet installed. Fuses shall be 13 Amp. Lower case unless otherwise specified.

16.26 **FUSED CONNECTION UNITS**

All fused connection units shall be 13 Amp with fuse and neon indicator lamp. Boxes shall be flush type with white or ivory cover plates and shall be switched type unless otherwise specified on the drawings.

16.27 **FUSES**

All fused connection units shall be 13 Amp. fuses, unless otherwise specified.

16.28 **LABELLING**

The front plate of each fused connection unit shall, unless otherwise specified, be engraved with the name of the appliance connected to it.

16.29 **LIGHTING SWITCHES**

Lighting switches shall be of the all-insulated rocker-operating plate-switch type to BS. 3676 of Ample rating. Switch inserts shall be white, set in white or ivory cover plates.

Switches controlling points in bathroom shall be placed outside the bathroom or consists of a ceiling switch operated by non-conducting cord, as specified. Switches mounted outdoors shall be of a weather-tight pattern.

Switches shall be one way, two ways or intermediate as specified and where a number of switches are mounted together, they shall be fitted in common box.

Ceiling switches shall be white or ivory semi-recessed pattern, and shall only be used where specified. Pull cords shall be fitted with shock absorbing springs.

16.30 **CEILING ROSES**

Ceiling roses, ivory or white shall be of the 3-plate pattern and fitted at all pendant points. An earthing terminal shall be provided and connected to the earth continuity conductor of the final sub-circuit where applicable.

Ceiling roses of the white porcelain semi-recessed pattern shall be used for surface installation, and shall be of the all-insulated type for a flush installation.

16.31 **LAMP HOLDERS**

Lamp holders shall generally be of plastic construction with porcelain interiors, and bayonet fitting.

Lamp holders for lamps rated 200 watts and above shall be of the Edison Screw type.

Battery type Lamp holders shall be of the all-insulated bayonet type.

16.32 **LIGHTING FITTINGS**

The Contractor shall supply and fit all lighting fittings of the type indicated in the drawings and in the Schedules. All fittings shall be suitable for operation on a 240 V.50 cycles supply. Lighting fittings rated other than 240 volts will not be accepted. All lighting fittings shall be supplied with lamps.

16.33 **FLUORESCENT FITTINGS**

Fluorescent fittings shall generally be of the batten type, with control gear contained within the supporting channel. All fittings shall be supported by two 20mm conduits to give a clearance of 25mm between the top of the fitting and the ceiling.

In the ceiling, the conduit boxes, to BS.31, shall be fitted with dome covers, to which the suspension conduits shall be joined, so that the lighting fitting hangs vertically below the conduit boxes. Fittings shall comply with BS. 3820 or class I, indoor normal atmospheres.

All fluorescent fittings shall be fitted with radio interference suppression capacitors and power factor correction capacitors and shall be earthed.

16.34 **REFLECTORS**

All reflectors for fluorescent fitting shall be made of sheet metal suitably shaped and stiffened, and shall be of white enamel finish.

16.35 **LAMPS**

All fittings shall be supplied complete with lamps of the type and rating specified. Fluorescent tubes shall be of the “white” type, except where otherwise stated. Pearly type tungsten lamps shall be fitted in open fittings.

16.36 **FLEXIBLE CORDS**

These shall be of 250 volt grade PVC insulated and shall comply with BS.7. Flexible cords shall not be less than 24/. 20 (23.0076). Flexible cords for pendant fittings shall be circular type, heat resistant and white in colour.

16.37 **M.V. & L.V EARTHING**

Earth electrodes shall be minimum 1.4 meters long by 12mm.diameter hard drawn copper rod, and shall be located not less than 3 meters apart at a convenient position 6 meters away from the building. The terminal head of each electrode shall be in a concrete inspection pit, with cover. If the resistance to earth is not satisfactory with one electrode then additional electrodes or an earth mat shall be provided, as directed by the Project Manager.

16.38 **DISTRIBUTION SYSTEM EARTHING**

All distribution boards shall be earthed in accordance with the I.E.E Regulations. All metal work associated with the installation shall be earthed to comply with the regulations currently in force.

16.39 **TESTING OF EARTHING SYSTEM**

The resistance of the earth continuity system, when measured between the main earthing point and any other point in the installation, including all conduit and other metal work which may provide a path to earth, shall not exceed 0.5 Ohm, where steel conduit forms part of the whole of the system, or 1.0 Ohm, if the earth continuity system is composed entirely of copper, copper alloy or aluminium.

When the installation is complete, the Contractor shall carry out tests for earth loop impedance, polarity, insulation resistance, ring circuit continuity and earth electrode resistance, in the presence of, and the satisfaction of the Project Manager and K.P & L Company. The Contractor shall rectify all work not giving test results within the limits prescribed.

Four copies of all test results shall be forwarded to the Project Manager and a Certificate of Completion will not be issued until such tests have been approved.

16.40 **P.M.E SYSTEM**

Provision shall be made for the P.M.E System at supply intake (where applicable)

“P.M.E” means that systems whereby the neutral conductor of the supply network is earthed at a prescribed number of points along its routes, together with the installation earth continuity conductor, at each consumer’s installation, so providing a metallic path for the flow of earth fault currents. The connections between the neutral conductor of the supply network and the earth continuity conductor of the installation shall be made by the Supply Authority at the point of intake only. The connection at the isolators will be made by the Contractor in the presence of the Project Manager after completion of all tests.

16.41 **COMMISSIONING.**

The whole installation shall be tested to the statutory requirement of the Electricity Authority, I.E.E Regulations and commissioned in the presence of and to the satisfaction of the Project Manager.

Four copies of the test reports shall be provided within seven days of carrying out the tests; and the reports shall include full details of how each test was carried out, and a copy of all readings taken.

**PART 17: PARTICULARS SPECIFICATION FOR ELECTRICAL INSTALLATION**

17.1 **ELECTRICAL LIGHTING INSTALLATION**

The Contractor shall supply, deliver, install, connect and test the electric lighting installation as detailed on the contract drawings and the Bill of Quantities.

17.2 **WIRING SYSTEM**

The lighting installation shall be carried out in single core PVC insulated copper cables with insulated earth continuity conductor enclosed in heavy gauge, PVC, super high impact conduit cast in situ in slabs or recessed in the general fabric of the building.

17.3 **LIGHTING ACCESSORIES**

Lighting Switches shall be flush mounted, single pole, 5 amp or 15 amp as required, rocker operated, micro grid switches with ivory plastic cover plates.

17.4 **ELECTRICAL POWER INSTALLATION**

The Sub Contractor shall supply, install, connect and test the electric power installation as detailed on the contract drawings. Work under this section shall include:

- a) Single phase general purpose power outlets in office and basement areas.
- b) Single and 3 phase power outlets for specialist mechanical equipment such as lifts and water booster pumps.

## 17.5 **WIRING SYSTEMS**

In general office areas on the ground and typical floors, 13A, single phase socket outlets shall be wired in single core PVC copper cables enclosed in existing trunking or P.V.C conduits as per these specifications.

In all other areas, wiring to 13A general purpose socket outlets, spur units and D.P. water Switches shall be in single Core PVC insulated copper cables enclosed in PVC heavy gauge conduit recessed in the general fabric of the building.

## 17.6 **POWER ACCESSORIES**

13A, single phase socket outlets shall be flush mounted rocker operated with ivory plastic cover plates. Water heater switches shall be 20Amp, flush mounting, double pole, rocker operated with Ivory cover plates and neon indicator.

3 phase socket outlets shall be 30Amps, surface type, wall mounting with integral interlocked isolator, light alloy housing, and shall be complete with 4 – pin & earth plug in housing.

Fused switches shall be double pole or triple pole and Neutral as shown on contract drawings wall mounting units with interlocked covers. All fused switch units shall be appropriately labelled to indicate the equipment they control.

Except where explicitly indicated otherwise, final wiring and connection to mechanical equipment from wall mounted fused switches or isolators shall be in single core, PVC insulated copper cables enclosed in PVC heavy gauge conduit recessed in general fabric of the building. Final connection to instant water heaters and other fixed single-phase equipment shall be by appropriate PVC insulated and sheathed flexible cables.

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	<p><b><u>CONSTRUCTION OF ENA FRESH PRODUCE MARKET</u></b></p> <p><b><u>Preliminaries</u></b></p> <p><b><u>CONCRETE TESTS</u></b></p> <p>Concrete test cubes, i.e. per set of four as described, including testing fee, labour and materials, making moulds, transport and handling, etc.</p> <p>Successful tests only :  Sets of four: No. @.....  (Tenderer must insert rate and extend)</p> <p>The Contractor is to organize with the testing laboratory that copies of the Test Cube Reports are forwarded direct to the Structural Engineer.</p> <p>The accurate record of all test cubes taken and crushed must be kept on site and the Contractor will only be reimbursed for successful tests upon production of laboratory certificates.</p> <p>Note:  The price per set inserted by the Tenderer is to include for making of the four cubes, curing, transporting and handling and crushing of one, two, three or four cubes in order to obtain a satisfactory result.</p> <p><b><u>VALUE ADDED TAX</u></b></p> <p><b>The tenderer is advised to include tax in the rates</b></p>				
	<b>Total Carried to Collection</b>				

<p>A</p> <p>B</p> <p>C</p>	<p><b><u>PRELIMINARIES</u></b>  <b><u>Site Preparation (Hoarding, Site Office, Site Storage)</u></b></p> <p>Temporary hoarding shall be provided all around the site. The hoarding shall be made up of hoarding iron sheets. The tenderers amount for hoarding shall be deemed to be inclusive of all legally demandable fees for the temporary hoarding by the Local and Central Authorities.</p> <p>The Contractor shall allow for thoroughly maintaining the hoarding, shed nets and gates throughout the contract and clearing away and making good disturbed ground on completion. All materials arising will remain the property of the Contractor and he should allow credit against this.</p> <p>Allow for provision of a Site office through hiring or constructing. The office shall be maintained for use by the Employer, the Contractor, the Consultants, and the Clerk of Works. The Contractor shall dismantle the office and make good disturbed surfaces upon completion of the works to the satisfaction of the Project Manager</p> <p>The contractor shall provide sheds or facilities for storage accommodation for all goods and materials liable to suffer damage from exposure to sunlight or inclement weather. The Contractor shall dismantle any temporary structures and make good disturbed surfaces upon completion of the works to the satisfaction of the Project Manager</p>				
	<p><b>Total Carried to Collection</b></p>				

<p>A</p> <p>B</p> <p>C</p>	<p><b><u>Preliminaries (Cont'd)</u></b></p> <p><b><u>Insurance for the Works</u></b></p> <p>The tenderer is advised to include acquisition of insurance cover for Contractor's employees and workmen on site (WIBA Insurance) and acquisition of insurance cover for works on site (CAR Insurance) in the Rates</p> <p><b><u>Performance Security</u></b></p> <p>Allow for provision of a performance security (bond) in the form of a bank guarantee or insurance bond in the amount of 10% of the Contract Sum. Note that no payment on account of the works executed will be made to the Contractor until he has submitted the Performance Bond to the Project Manager duly signed, sealed, and stamped from an approved bank or insurance agency approved by PPRA</p> <p><b><u>Sign Board</u></b></p> <p>-</p> <p>The Contractor shall provide and erect where directed and maintain during the whole period of the construction and remove at completion one approved temporary notice board to the Architect's standard design giving a brief description of the works and showing the names of the employer, Contractor and the consultants, with sufficient space to append the names of the other legal statutory bodies. The lettering concerning the Architect, Quantity Surveyor and Engineer is not to be more than 50mm high.</p>				
	<p><b>Total Carried to Collection</b></p>				

	No other signboards or advertising will be permitted without the written authority of the Employer and Project Manager and this rule is to be observed throughout the course of the Contract.				
A	<p><b><u>Site Security</u></b></p> <p>Allow for provision of security of all works, stores, materials, plant, personnel etc. both the Main Contractor and sub-contractors. The contractor shall also provide all necessary watching, lighting, and other precautions as necessary to ensure the security, the safety and protection of the public.</p>				
B	<p><b><u>Health and Safety</u></b></p> <p>The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement.</p> <p>In addition to complying with the requirements of the Occupational Safety &amp; Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations.</p> <p>The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>The Employer reserves the right to hold back the amount priced against this Clause either in full or in part due to any non-performance by the Contractor under this Clause.</p>				
	<b>Total Carried to Collection</b>				

<p>A</p>	<p><b><u>Preliminaries (Cont'd)</u></b>  Adequate temporary Notices and Signs shall be posted to indicate e.g. that building operations are in progress and entry is at one's own risk or trespassers are liable to be prosecuted or such other Notices and Signs as the Architect may consider necessary from time to time. The design and location of such signs will be to the approval of the Architect</p> <p><b><u>Materials, Tools, Plant, and Scaffoldings</u></b>  All materials and workmanship used in the execution of the works shall be of the best quality and description. Any materials for the works condemned by the Architect shall immediately be removed from the site at the Contractor's expense.</p> <p>All materials and workmanship shall unless otherwise specified or described conform to the appropriate British Standards Institution specification current at the date of tender</p> <p>The works throughout shall be executed by skilled workmen well versed in their respective trades.</p>				
<p>B</p>	<p>The contractor shall be responsible for the provision of all materials, hoists, Tower cranes, tackle, plant, vehicles, tools and appliances scaffolding, transport and workmen required for the works except in so far as may be stated otherwise herein and he shall allow for the provision of the foregoing</p> <p>No timber used for scaffolding, formwork or similar purpose shall be used afterwards in the permanent works.</p> <p>The Contractor shall allow for all costs related to hoisting his or his Sub-Contractor's materials for fixing at any level within the limits shown on the drawings or included in the general description of the works.</p> <p>Allow for adjudicator/arbitrator a provisional sum rated at Kshs. 20,000.00 per hour for utmost thirty (30) hours</p>				<p>600,000.00</p>
	<p><b>Total Carried to Collection</b></p>				

A	<p><b><u>Preliminaries (Cont'd)</u></b></p> <p>All such plant, tools and scaffolding shall comply with all regulations whether general or local in force throughout the period of the contract and shall be required as may be necessary to comply with any amendments in or additions to such regulations</p> <p><b><u>Water for the Works</u></b></p> <p>The contractor shall provide at his own risk and cost all water for use in connection with the works including the work of sub-contractors whether through arrangements with the local authority or water suppliers or the institution. He shall also provide temporary storage tanks and tubing etc. as he may consider necessary and clear away at completion or when no longer required. All water shall be fresh, clean and pure, free from earthly vegetable or organic matter, acid or alkaline substance in solution or suspension. No claims for lack of water or water pressure will be entertained.</p> <p><b><u>Lighting and Power</u></b></p> <p>The contractor shall provide at his own risk and cost all temporary artificial lighting and power for use on the works including all sub-contractors and specialists' requirements and including all temporary connections, wiring, fittings etc. and clearing away on completion. The Contractor shall pay all fees, bills and obtain all permits in connection therewith without charge to subcontractors. No claims due to lack of electricity or due to power fluctuations will be accepted.</p> <p><b><u>Licenses and Statutory Approvals</u></b></p> <p>Allow for liaising and obtaining of relevant licenses and statutory approvals for the works from the local authorities</p>				
	<b>Total Carried to Collection</b>				

	<b><u>Preliminaries (Cont'd)</u></b>				
	<b><u>Material Samples</u></b>				
A	The contractor shall furnish at the earliest possible opportunity before work commences and at his own cost any samples of materials or workmanship that may be called for by the project manager for his approval or rejection until such samples are approved to be the minimum standard for the work to which they apply. The Contractor shall ensure their protection against theft, loss or damage.				
B	Allow for preparation of working drawings "As built" record drawings.				
C	Allow for preparation and submission of all operation manuals, test reports among other handover documents				
	<b>Total Carried to Collection</b>				
	<b><u>COLLECTION</u></b>				
	From Page 1				
	From Page 2				
	From Page 3				
	From Page 4				
	From Page 5				
	From Page 6				
	From Page 7				
	<b>TOTAL FOR PRELIMINARIES</b>				

# **BUILDER'S WORK**

	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs.)	TECH. SPECS
	<b><u>ELEMENT NO. 1</u></b>					
	<b><u>SUBSTRUCTURE - ALL PROVISIONAL</u></b>					
	<u>Site clearance/ demolitions</u>					
A	Clearing site of all bushes, shrubs, undergrowth and the like; small trees not exceeding 600mm girth; trees > 600mm<1200mm girth; disposing arisings	SM	2,160			3.3 & 3.4
B	Allow for careful removal of all existing structures: comprising of shed in structural steel frame and corrugated (approximate plinth area 1500SM) bidder shall visit the site before quoting for this item. Allow for removal of all debris and make good disturbed works. All arising materials from demolitions shall be stored on site as directed and shall not be used or re-used in the construction without express authority from the PM.	ITEM				2.1
	<u>Excavations</u>					
	<u>Notes</u>					
	<u>Allow for planking &amp; strutting sides of excavations; Keep excavations free from ground and surface water within your rates</u>					
C	Mass excavating over site to reduce levels in depths not exceeding 1.50m deep starting from existing ground level	CM	1,728			3.5
D	Excavating trenches in normal soil to receive foundations not exceeding 1.50m deep starting from reduced level	CM	144			3.5
E	Excavate for column bases not exceeding 1500 mm deep commencing from reduced level	CM	252			3.5

F	Load, wheel and deposit on site surplus excavated material as directed by the project manager	CM	650			3.7
G	Return, fill and ram excavated material around foundations	CM	1,474			3.7
	<u>Hardcore filling</u>					
H	300mm thick natural stone hardcore or other approved inert material: well watered and compacted in 150 mm thick (maximum) layers	SM	82			3.9
	<u>Hardcore blinding</u>					
I	50 mm Thick approved quality murrum blinding to surfaces of hardcore	SM	82			3.9
J	Ditto : 200mm thick	SM	1,293			3.9
<b>Carried to collection</b>						
	<u>Polythene underlay</u>					
A	Gauge 1000 polythene underlay laid on hardcore blinding	SM	82			3.13
	<u>Ant termite treatment</u>					
B	Pesticide anti-termite chemical treatment: supply and apply approved pesticide; applied by a professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: with a minimum 10-year guarantee	SM	1,375			3.12
	<u>Surface treatments</u>					
C	Grade bottoms of excavation to falls and cross falls; compact to 95 percent B.S. compaction by an approved roller	SM	1,293			4.4
D	50 mm thick dust bed to receive concrete block paving (measured	SM	1,293			4.6

	separately)					
	<b><u>Precast concrete works</u></b>					10.10
E	60 mm thick precast concrete heavy duty paving blocks ( <i>minimum strength 35KN per square millimeter</i> ) to manufacturer's specification laid to fall	SM	1,293			
	<u>Precast concrete units (class 25/20) vibrated; bedded, jointed and pointed in cement mortar (1:3), fair faced on all exposed surfaces</u>					
F	125 x 125 mm Flush channel: bedded jointed and pointed in cement and sand (1:3) mortar: laid on and including 300 x 100 mm concrete 1:3:6 foundation: excavation: 100 x 200 mm haunching	LM	120			10.10
	<u>In situ reinforced concrete class 25/20: vibrated: in</u>					4.1-4.21
G	Column bases	CM	67			
H	Columns	CM	14			
I	Strip Foundation	CM	28			
J	Ditto but 150 mm thick floor slab	SM	82			
	Carried to collection					
	<u>Marine boards formwork to: -</u>					4.28-4.31
A	Columns	SM	143			
B	Ditto: Foundation strip	SM	25			

C	Edges: slabs over 75 but not exceeding 150 mm girth  <u>Reinforcement</u> <u>High tensile, MT ribbed bar</u> <u>reinforcement to BS 4461</u>	LM	43			4.22- 4.26
D	T8 Diameter bars	Kgs.	454			
E	T10 Diameter bars	Kgs.	790			
F	T12 Diameter bars  <u>Mesh fabric reinforcement ref. A-142</u> <u>to B.S 4483 and setting in concrete with</u> <u>300mm side and end laps (measured</u> <u>nett - allow for laps).</u>	Kgs.	2,140			4.24
F	Fabric ref. A-142 in surface bed.  <u>Approved natural stonework; roughly</u> <u>squared; bedded in cement mortar</u> <u>(1:4); 25 mm wide x 20 Gauge hoop</u> <u>iron strapping every alternate course</u>	SM	82			5.6
G	200mm thick foundation walls	SM	300			
<b>Carried to collection</b>						
<u>Collection</u>  From page M/1  From page M/2  From Above						
<b>TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY</b>						

<b><u>ELEMENT No. 2</u></b>					
<b><u>REINFORCED CONCRETE WORKS</u></b>					
<u>In situ reinforced concrete class 25/20: vibrated: in</u>					4.1-4.21
A	Beams	CM	5		
B	Columns	CM	3		
C	175mm thick suspended slab	SM	82		
<u>Reinforcement (All Provisional)</u>					
<u>High tensile,TMT ribbed bar reinforcement to BS 4461</u>					4.22- 4.26
D	T8 Diameter bars	Kgs.	264		
E	T10 Diameter bars	Kgs.	168		
F	T12 Diameter bars	Kgs.	1,389		
G	T16 Diameter bars	Kgs.	357		
H	T20 Diameter bars	Kgs.	391		
<u>Sawn formwork as described to:-</u>					4.28- 4.31
I	Sides and soffits of beams	SM	49		
J	Sides: Columns	SM	36		
K	Soffits of suspended slab	SM	82		
<b>TOTAL FOR REINFORCED CONCRETE WORKS CARRIED TO SUMMARY</b>					

<b><u>ELEMENT NO. 3: STRUCTURAL STEEL</u></b>						
<b><u>The following in structural mild steel work including welding, hoisting base plate and holding down bolts. All welds to be 6mm fillet welds. All mild steel sections to be primed with red oxide after fabrication and fixing.</u></b>						8.5-8.9 & 9.1-9.7
A	100 x 100 x 4mm Thick SHS (11.6KG/M)  <u>Base Plate</u>	KG	4,610			
B	300 x 300 x 8 mm thick base plate with 4 No. Holding down U Bolts 16 mm diameter holes  <u>Gusset Plate</u>	NO	132			
C	200x200x4mm thick stiffener plates including boring holes, all welds, and connectors  <u>Bolts</u>	NO	264			
D	1000mm long, 16mm diameter U bolts including nuts and washers  <u>Top Plate</u>	NO	132			
E	300 x 300 x 8 mm thick plate with 4 No. Holding Bolts 16 mm diameter holes  <u>Bolts</u>	NO	66			
F	50mm long, 16mm diameter bolts including nuts and washers <u>Gusset Plate</u>	NO	264			
G	200x200x4mm thick stiffener plates including boring holes, all welds, and connectors	NO	264			
<b>TOTAL FOR STRUCTURAL STEEL CARRIED TO SUMMARY</b>						

	<b><u>ELEMENT No. 4</u></b>					
	<b><u>WALLING</u></b>					
	<u>Fine dressed natural stones bedded and jointed in cement and sand (1:3) mortar and reinforced with 25mm wide x 20-gauge hoop iron in alternate courses as described in:</u>					5.6 -5.10
A	200mm thick walls with and including 25x3mm thick hoop iron strips every alternate course.	SM	135			
B	200mm thick dwarf wall	SM	180			
C	Ditto: 150mm thick internal Walling	SM	57			
	<u>Dump proof course</u>					
D	200mm wide approved dump roof course laid and bedded in and including cement and sand mortar (1:4)	LM	60			5.9
	<b>TOTAL FOR WALLING TO SUMMARY</b>					

	<b><u>ELEMENT No. 5</u></b> <b><u>ROOF (ALL PROVISIONAL)</u></b>					
	<b><u>ROOF STRUCTURE AND COVERING</u></b> <b><u>Supply, Fabricate and Fix the following in structural steelwork including gusset plate, holding down bolts and base plates. All welds to be 6mm fillet welds. All mild steel sections to be primed with red oxide after fabrication and fixing.</u></b>					8.5-8.9
	<b><u>TRUSS TYPE T1</u></b>					
A	75 x75 x 3mm SHS rafter (6.8KG/M)	KG	945			
B	75 x75 x 3mm SHS Bottom tie (6.8KG/M)	KG	816			
C	50 x 50 x 3mm SHS ties and struts (4.43KG/M)	KG	1,001			
D	75 x75 x 3mm SHS king post (6.8KG/M)	KG	150			
	<b><u>TRUSS TYPE T2</u></b>					
E	75 x75 x 3mm SHS rafter (6.8KG/M)	KG	1,421			
F	75 x75 x 3mm SHS Bottom tie (6.8KG/M)	KG	1,224			
G	50 x 50 x 3mm SHS ties and struts (4.43KG/M)	KG	1,502			
H	75 x75 x 3mm SHS king post (6.8KG/M)	KG	442			
	<b><u>ANGLE BRACING</u></b>					
I	50 x 50 x 3mm L- bracing (2.3KG/M)	KG	331			
	<b><u>INDEPENDENT RAFTER</u></b>					
J	75 x75 x 3mm SHS rafter (6.8KG/M)	KG	3,842			
	Carried to collection					

	<b><u>PURLINS</u></b>				
A	150x50 x 3mm Z-purlins (6.16KG/M)	KG	7,700		
	<b><u>SUNDRIES</u></b>				
D	Angle cleats size 75x50x3mm thick	NO	550		
E	12mm diameter ;1300mm Long (average) anti-sag rods threaded on both end complete with nuts and washers fixed onto Z-purlins including boring holes	NO	272		
	<b><u>ROOF COVERING</u></b>				
	<u>28 Gauge steel sheeting type corrugated approved prepainted to an approved standard colour and fixed to the steel purlins to approval (provide manufacturer's catalogue)</u>				6.1
F	Roof sheeting in mono and double pitch; laid with 140mm side laps and minimum 200mm end laps and fixed to the existing metal purlins with and including J-bolts, washers, nuts and rubber caps or with self-tapping screws as directed by the project manager.	SM	1,508		
	<u>Standard casement steel light vent with louvers</u>				8.5-8.9
G	Overall size 650mm high comprising 300mm high glazed lower part with 5mm thick clear glass and 300mm high louvers upper part	SM	98		
	<u>14Gauge mildsteel, primed before fixing as described in:</u>				8.5-8.9

p c c G	Overall size 1800mm High,14G side branding boards welded including 40x40x2mm frame all round and intermediate verticals members at 600mm centres	LM	160			
H	Branding the facade with logos and names as illustrated in the drawings	LM	160			
<b>Carried to collection</b>						
<u>RAINWATER GOODS</u>						
<u>14Gauge Galvanized stainless steel, as described in:</u>						
A	1200mm girth, 2mm thick eaves gutter (850x200x150mm), welded including 40x40x2mm SHS brackets and/ including primer before fixing	LM	156			9.5
B	600mm girth, 2mm thick eaves gutter (250x200x150mm), welded including 40x40x2mm SHS brackets and/ including primer before fixing	LM	52			
C	Extra over ditto for 100 mm diameter nozzle outlet.	NO	36			
D	Ditto, but for stopped ends	NO	36			
E	100 mm diameter HDPE rain water down pipe fixed to masonry with approved holderbats	LM	144			
F	Extra over ditto for swan-neck	NO	36			

G	Ditto, but for shoe  <u>Prepare and apply three coats gloss oil paint on:-</u>	NO	36			12.1-12.28
H	External surfaces of large pipe	LM	144			
I	General metal surfaces of gutters	SM	374			
J	Extra over ditto for 100 mm diameter nozzle outlet fullbora	NO	2			
<b>Carried to collection</b>						
<p><b><u>Collection</u></b></p> <p>From page M/ 7</p> <p>From page M/ 8</p> <p>From Above</p>						
<b>TOTAL FOR ROOFING CARRIED TO SUMMARY</b>						

<b><u>ELEMENT NO. 6 - DOORS</u></b>					
<u>Mild steel doors</u>					9.8
A	Mild steel door overall size 1000mm x 2400mm high with hinges, tower bolt, handles and lock and fixed into position to approval	NO	3		
B	Ditto size 1200mm x 2400mm high ditto	NO	1		
C	Ditto size 1200mm x 2100mm high ditto	NO	1		
<b><u>FLUSH DOORS</u></b>					7.8
<u>Solid Cored flush door: mahogany lipped edges: mahogany veneered both sides</u>					
D	45mm thick door overall size 900 x 2400 mm high.	No.	9		
E	45mm thick door overall size 1200 x 2400 mm high double swing single leaf	No.	1		
<u>Prime grade wrot mahogany</u>					7.7
F	100 x 50 mm Door frame: rebated: plugged	LM	56		
G	100 x 50 mm Transome; twice rebated	LM	9		
H	40 x 20 mm Architrave: splayed	LM	56		
I	15 mm Quadrant	LM	56		
<u>Ironmongery</u>					7.8
J	150mm brass butt hinges	No.	31		

K	Vacant/ engaged lock set complete with handle furniture	No.	10			
L	Tower bolt	No.	10			
	<u>Painting</u>					8.10 & 12.1- 12.28
M	Prepare and apply three coats of super gloss to metallic surfaces	SM	20			
N	Prepare and apply three coats of clear varnish to timber surfaces	SM	39			
O	Ditto 100 - 200mm girth	LM	65			
P	Ditto but not exceeding 100mm girth	LM	111			
<b>TOTAL FOR DOORS CARRIED TO SUMMARY</b>						

<b><u>ELEMENT No. 7</u></b>					
<b><u>FLOOR FINISHES</u></b>					
<u>Terrazzo Paving</u>					
A	50 mm thick (25mm c+s backing & 25mm thick terrazzo layer) roof top finish with and including cementitious water proofing additive	SM	82		10.7
<u>Woodfloat cement and sand screed (1:4) in:</u>					
B	32 mm to receive tiles	SM	82		
<b><u>Coloured Non-slip ceramic floor tiles</u></b>					
C	6mm thick non slip floor tiles approved fixed with and including cement slurry	SM	82		10.9
<u>Ceiling</u>					
<u>Gauged plaster 1:1:9 as described to:</u>					
G	12mm Thick soffits of ceilings with and including cementitious water proofing additive	SM	82		10.1-10.4
<u>Paintwork</u>					
F	Skim prepare and apply three coats Sikvinyl paint to plastered ceiling surfaces.	SM	82		
<u>Gauged plaster 1:1:9 as described to:</u>					
G	Walls and concrete surfaces internally	SM	152		10.1-10.4
<u>Paintwork</u>					
H	Prepare and apply three coats sikvinyl paint to plastered soffits surfaces.	SM	152		12.1-12.28

TOTAL FOR FLOOR FINISHES CARRIED TO SUMMARY						
<b><u>ELEMENT NO. 8 - WALL FINISHES</u></b>						
<b><u>EXTERNAL</u></b>						
	<u>Wood float render</u>					10.1-10.4
A	19mm thick cement and sand 1:4 render to walls & concrete surfaces	SM	488			
	<u>Paintwork</u>					12.1-12.28
B	Skim, Prepare and apply three coats plastic emulsion paint to rendered surfaces.	SM	488			
<b><u>INTERNAL</u></b>						
	<u>Gauged plaster 1:1:9 as described to:</u>					10.1-10.4
C	Walls and concrete surfaces internally	SM	59			
	<u>Cement and sand 1:4 as described to:</u>					10.1-10.4
D	10mm thick backing to receive wall tiles ( ms)	SM	67			
	<u>Coloured and glazed ceramic wall tiles</u>					10.9
E	6mm thick wall tiles approved complete with cement grouting to joints to match.	SM	67			
	<u>Paintwork</u>					12.1-12.28
F	Prepare and apply three coats sikvinyll paint to plastered surfaces.	SM	59			

TOTAL FOR WALL FINISHES CARRIED TO SUMMARY						
<b><u>ELEMENT No. 9</u></b>						
<b><u>WINDOWS</u></b>						9.8 & 11.1- 11.17
<u>Standard casement steel windows</u>						
A	Window overall size 600mm high complete with 5mm obscure glass and glazing fixed	SM	6			
B	Window overall size 1200mm high with 5mm clear glass and glazing fixed	SM	5			
<u>Prepare and apply one undercoat and two finishing coats of super gloss paint or other equal and approved paint as per architects details and approval to :-</u>						12.1- 12.28
C	Prepare and apply three coats of super gloss to metallic surfaces	SM	22			
<b>TOTAL FOR WINDOWS CARRIED TO SUMMARY</b>						

	<b><u>SUMMARY</u></b>					
1	SUBSTRUCTURE					
2	REINFORCED CONCRETE WORKS					
3	STRUCTURAL STEELWORK					
4	WALLING					
5	ROOFING					
6	DOORS					
7	FLOOR FINISHES					
8	WALL FINISHES					
9	WINDOWS					
	<b>TOTAL CARRIED TO GRAND SUMMARY</b>					

# PLATFORMS

DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECHNICAL SPECIFICATION
<b><u>ENA MARKET PLATFORMS</u></b>					
<b><u>170NO. WORKTOP OVERALL SIZE 1700x1500mm</u></b>					
<b><u>Worktop</u></b>					
75mm Thick concrete class 25 in slabs	SM	383			4.1-4.21
Layer of BRC mesh fabric reinforcement ref. A142 in slab	SM	383			4.24
Formwork to soffits of slabs	SM	383			4.28-4.31
Ditto to edges of slabs 75 - 150mm high	LM	914			4.28-4.31
150mm Thick stone support walls	SM	765			5.6 -5.10
12mm Cement sand plaster to walls	SM	1,530			10.1-10.4
Prepare and apply one undercoat and two finishing coats of silk vinyl paint or other equal and approved	SM	1,530			12.1-12.28
Ditto to soffits of slabs	SM	383			12.1-12.28
38 mm thick Cement and sand 1:4 trowelled smooth and vanish suspended slab platform	SM	383			12.1-12.28

<b><u>MILD STEEL DOORS TO LOWER COMPARTMENT</u></b>					
<p>- <u>Supply, delivery and installation of a mild steel plain sheet door, including permanent vent on the lower and top parts, with Locking system 2 padlocks. Painted with colour powder coating grey spray painting</u></p> <p>- Overall size 1200 x 700 mm (Extreme height) high mild steel door faced side including frame</p>	NO	170			9.8
<b>TOTAL AMOUNT FOR PLATFORMS CARRIED TO MAIN SUMMARY</b>		<b>KSHS</b>			

# **ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECS REF.
A	<u>Supply, install, test and commission the following as per engineers specification</u> Lighting points wired with 3x1.5mm <sup>2</sup> SC PVC copper cable drawn in 20mm diameter PVC heavy gauge conduits concealed in building fabric all other accessories included but without fittings and switches for: a) One way switching					16.5/6 /7/8/ 9 /10/14
	b) Two way switching	50	No			
		20	No			
B	<u>Switches</u> 10 Amps lighting switches as approved by the engineer a) 1gang 2 ways					16.29
	b) 2gang 2 ways	5	No			
	c) 3gang 2 ways	10	No			16.29
	a) 6 way consumer unit as approved by the engineer	5	No			16.29
	b) Minature circuit breaker as approved by the engineer	3	No			16.29
	c) Supply and install 10.0mm sq 2 core pvc/swa/pvc copper cables from powerhouse to all consumer units	12	No			16.2
		150	MTRS			17.2
C	Lighting fittings complete with appropriate rated lamps as follows a) 1200mm LED single bare batten fluorescent fitting.					16.33/ 35
	b) 18watts circular service LED Luminaire	80	No			
		15	No			16.33/ 35

	Power points wired with 3x2.5 mm <sup>2</sup> sc pvc copper cables drawn in diameter pvc heavy gauge conduits concealed in building fabrics all other necessary accessories	10	No			16.24
D	a.Twin socket outlets as first quality and approved	10	No			16.24
	Electrical earthing comprising 6.0mm <sup>2</sup> earth lead drawn in 25mm diameter pvc heavy gauge conduits and connected to 1200 mm long x 15mm diameter copper earth electrode with a driving tip and clump 300mm x300mm pre-cast concrete inspection pit with removable cover.	1	Item			16.37
E	18SWG surface mounted and spray painted looping box to accommodated 2No cut outs, 63A single pole switch mccb and all other other accessories	4	No			
	Allow for 1 No. single phase power connection from KPLC	1	Lot			
	<b>TOTAL FOR ELECTRICAL WORKS</b>		<b>KSHS</b>			

# **CIVIL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECs. REF.
<b>BILL 1: EARTHWORKS</b>						
1.01	Fill in soft material including benching of embankments and compaction to 95% MDD (AASHTO T99) in layers not exceeding 150mm	m <sup>3</sup>	30			3.9
1.02	Extra Over Item 1.01 for compaction of the top 300 subgrade to 100% MDD.	m <sup>3</sup>	30			3.9
1.03	Ditto item 1.01 but in hard material	m <sup>3</sup>	5			3.6
1.04	Cut to spoil in soft material	m <sup>3</sup>	336			3.9
1.05	Ditto item 1.04 but in hard material	m <sup>3</sup>	30			3.6
1.06	Compaction of top 300mm below formation level in cuts to 100% MDD.(AASHTO T99)	m <sup>3</sup>	180			3.6&3.9
<b>Bill No. 1 Total Carried Forward to Grand Summary</b>						
<b><u>BILL 2: EXCAVATION AND FILLING OF STRUCTURES</u></b>						
2.01	Excavate to spoil in soft materials.	m <sup>3</sup>	180			3.5
2.02	As item 2.01 but in hard material.	m <sup>3</sup>	5			3.6
<b>Bill No. 2 Total Carried Forward to Summary</b>						
<b><u>BILL 3: GRADING AND GRAVELLING</u></b>						
3.01	Provide gravel sub-base material (G30), spread, compact to at least 98% M.D.D (AASHTO T-1 80) and shape to level and tolerance.	m <sup>3</sup>	300			3.9
<b>Bill No. 3 Total Carried Forward to Grand Summary</b>						

	<b>BILL 4: STORM WATER MANAGEMENT</b> <u>No separate payment shall be made for blinding and hauling to spoil unsuitable excavation materials and the cost of such shall be included in the rates and/or prices</u>				
8.01	Excavate for provide, lay, joint and haunch and 600mm diameter culverts with 150mm thick class 25/20 concrete complete with class 25/20 concrete headwalls and wing walls including form work and backfills	m	50		4.1-4.21
	Excavate on site drain trench not exceeding 1.5m deep including plucking and strutting, disposal of soil to receive drainage channels and forming sloping sides in well compacted murrum bed.	m <sup>3</sup>	66		3.5
	Provide, place and compact Class 25/20 concrete to open drains base and sides as instructed by the Engineer	m <sup>3</sup>	50		4.1-4.21
	Provide and place in concrete BRC mesh No. 142 reinforcement or equivalent, including all necessary tying wire, spacer blocks, laps and all necessary accessories. No allowance will be made for laps.	m <sup>2</sup>	294		4.22-4.26
	<u>Formwork : Provide, erect and afterwards dismantle and remove all the formwork as specified by the Engineer</u>				
	Provide & fix in place formwork to achieve class F1 finish	m <sup>2</sup>	441		4.28-4.31
	Fair face plain concrete strip class 25, size; 150x250mm high to on both side of drain	m <sup>3</sup>	7		4.1-4.21

	Construct 245m long open drain channel size; 450mm wide and 450mm deep, 150mm thick reinforced concrete walling and base; including 63x63x4mm thick MS angle line embedded in concrete with fish-tailed 12mm diameter x 125mm long MS inserts, in drain walling to receive steel grating (ms); Provide fabricated 245m long heavy duty grating; 450mm wide with 20mm ribbed bars welded in double MS angle 63x63x4mm thick frame at 50mm centres . Prepare and apply gloss primer and two coats of 1st grade aluminum gloss paint.	m	245			4.1-4.21
		m	245			8.5-8.9 & 9.1-9.7
<b>Bill No. 4 Total Carried Forward to Grand Summary</b>						
<b><u>SUMMARY OF BILL OF QUANTITIES</u></b> <b><u>ENA MARKET CIVIL WORKS</u></b>						
1	BILL 1: EARTHWORKS	-	-			
2	BILL 2: EXCAVATION AND FILLING OF STRUCTURES					
3	BILL 3: GRADING AND GRAVELLING					
4	BILL 4: STORM WATER MANAGEMENT					
<b>TOTAL CIVIL WORKS</b>						

# **MECHANICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECs. REF.
	<p><b>SANITARY FITTINGS</b>  <u>Supply, deliver, install, test and commission the following sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.</u>  <u>Note: (i) All sanitary fittings shall be in approved colour.</u></p>					14.2
A	<p>-  <b>Water closet Suit(WC)</b>  Squatting water closet suite comprising of white ceramic floor mounted squatting pan with 7 litre dual flush ceramic cistern and integral foot threads' or 'S' trap connector.</p>	NO	5			14.2
B	<p><b>Bib Tap</b>  20mm Chrome plated brass Quarter turn lever handle tap.</p>	NO	8			14.2
C	<p><b>Countertop sink</b>  Countertop sink contemporary mounted on worktop. Basin size 600x460x95mm included of one tap hole on basin and 32mm waste outlet.</p>	No	4			14.2
D	<p><b>Soap Dispenser</b>  Soap Dispenser, capacity 1.136 litres complete with plastic rawl plugs, fixing screws, lock and key complete with initial fill of soap gel. Size 125 x 100 x 290mm high.</p>	No	3			14.2
	<b>Mirrors</b>					14.5

E	6mm thick polished plate glass, silver backed mirror with beveled edges, size 610x497mm plugged and screwed to wall with 4No. Chrome plated chrome capped screws and 5mm thick foam back nest.	No	4			
	<b>Ambulant Disabled Water Closet Suite</b>					14.2
F	Close wash down water closet suite for the elderly and disabled in white complete with horizontal outlet AND BOTTOM SUPPLY AND OVERFLOW WITH CLOSE COUPLING SIDE LEVER TREATMENT, 7.5 litre cistern, raised heavy duty toilet seat and cover and S-trap outlet and 600 x 35mm stainless steel grab rails (4No.). The set to be complete with wash and hand basin, 6mm thick mirror, toilet roll holder and robe hook.	No	1			

**Total carried to collection page Mech-6**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECS REF.
G	<b>FLEXIBLE CONNECTOR</b> 15mm diameter x 300mm long flexible connectors complete with integral chrome plated angle valve for connecting the sanitary fitting to water supply.	No	14			14.2
H	<b>Shower fitting</b> Shower fitting wall type with concealed riser pipe, carina handle and adjustable shower rose	No.	2			14.2
	<b>Soap Dish</b>					14.2

I	Wall mounted soap dish, frosted glass in approved color of size 140mmx119mm.	No.	2		
	<b>Towel Ring</b>				14.2
J	Chrome plated square shaped towel ring fixing screws and plates.	No.	2		
	<b>Instant Shower Heater</b>				14.2
K	Instant electric shower head heater with embedded rod type sheathed element. Electrically insulated with electronic temperature control complete with wide rose and overflow to withstand a working pressure of up to 400kpa. It shall have a heating capacity of about 5.5kw and complete with extension shower arm and 4mm <sup>2</sup> electric supply cable to neon lit DP switch,	No	2		
<b>Total carried to collection page Mech-6</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECSS. REF
	<b><u>Internal Plumbing Works</u></b>					15.7/15. 8
2	Supply, deliver and install Polypropylene Random Copolymer (PPR) pipes, including all fittings e.g. couplings, connectors, joints unions etc. as required in running length of pipework. Also where necessary for pipe fitting clips, holder bats plugged or screwed.					
	<b>PPR Pipes</b>					14.3
A	32mm diameter pipework	Lm	40			
B	25mm diameter pipework	Lm	42			
C	20mm diameter pipework	Lm	38			
	<b>Bends</b>					14.4
	32mm diameter bend	No	9			
D	25mm diameter bends	No.	7			
	20mm -ditto-	No	11			
	<b>Tees</b>					14.4
	32mm equal tee	No	7			
E	25mm equal Tees	No.	5			
E	20mm equal Tees	No.	11			
	<b>Threaded Fittings</b>					14.4
F	25mm x 3/4" dia. female threaded 90° bend	No	6			
G	25mm x 1/2" dia. male threaded 90° bend	No	17			
H	20mm x 1/2" dia. male threaded 90° bend	No	24			
	<b>Reducers</b>					14.4
I	32x25mm reducer	No	10			
J	32x20mm reducer	No	5			

K	<b>GATE VALVE</b> 32mm dia. approved medium pressure screw down full way non- rising stem wedge gate valve to BS 1952, with wheel and head joints to steel tubing.	No	6			15.9
L	<b>Testing and Commissioning</b> Allow for setting to work, testing and commissioning of the whole plumbing system to the satisfaction of the Engineer	No.	1			15.11
<b>Total carried to collection page Mech-6</b>						
<b>ITEM DESCRIPTION UNIT QTY RATE AMOUNT (Kshs) TECH. SPECs. REF</b>						
N	<b>WATER SUPPLY</b> Allow water connection to the existing local water suppliers. This includes meter application and installation	No	1			15.7,15.8
O	<b>STORAGE TANK</b> Double layer Plastic tank of 2,500 litres capacity and to be fitted with necessary inlet, outlet and overflow accessories.	No	2			14.7
P	Double layer Plastic tank of 10,000 litres capacity and to be fitted with necessary inlet, outlet and overflow accessories.	No	2			
Q	<b>BOOSTER PUMP</b> supply and install a water booster pump and the necessary accessories with a flow 40 lts/min, height max 30M, pressure max 6 Bar and electric supply power>1.0W	No	1			14.8
<b>Total carried to collection page Mech-6</b>						

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECs REF
	<b><u>INTERNAL FOUL WATER DRAINAGE</u></b>					14.4
	Supply, deliver and install the following UPVC, MUPVC, soil and waste systems respectively to B.S 5255 with fittings fixed to Manufactures Printed instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system.					
	<b>MuPVC and uPVC Waste and Soil pipework</b>					14.4
A	150mm diameter heavy gauge grey mUPVC pipe	Lm	18			
B	100mm diameter heavy gauge golden brown UPVC pipe	Lm	24			
C	50mm diameter waste pipe	Lm	12			
D	32mm diameter waste pipe	Lm	18			
	<b>Bends</b>					14.4
E	100mm diameter bend	No	7			
F	50mm diameter bend	No	2			
G	32mm diameter bend	No.	12			
	<b>Tees</b>					14.4
H	32mm equal tee	No	12			
I	32mm diameter sweep tee	No.	5			
	<b>Access Caps</b>					14.4
J	32mm diameter access cap	No.	12			
	<b>Reducing Sockets</b>					14.4
K	50 x 32 reducing socket	No.	5			
L	100 mm diameter WC	No	6			

	connector					
	<b>Traps</b>					14.4
M	100mm floor gully complete with cover	No.	5			
N	100mm vent cowl	No.	1			
O	Standard Inspection Chambers (manhole)	No	6			
<b>Total carried to collection page Mech-6</b>						

<b><u>COLLECTION PAGE FOR SANITARY FITTINGS, PLUMBING AND DRAINAGE WORKS</u></b>						
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT (Kshs)</b>	<b>TECH. SPECs REF</b>
1	Total carried forward from page Mech-1					
2	Total carried forward from page Mech-2					
3	Total carried forward from page Mech-3					
4	Total carried forward from page Mech-4					
5	Total carried forward from page Mech-5					
<b>TOTAL CARRIED FORWARD FOR PLUMBING AND</b>						

DRAINAGE						
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECSs REF.
	<b>Fire Protection</b> Supply, deliver and install the following firefighting equipment in positions indicated on the contract drawings or as shall be instructed by the Engineer. Supply and install the following firefighting installation and equipment as described and shown on the drawings. Tenderers should allow for all fittings, jointings couplings including unions and clamps where necessary for the proper functioning of the installation when pricing.					15.1
A	<b>Hose reel</b> 20mm diameter 30m long swinging type hose reel complete with delivery valve, mild steel feed pipe, isolation valve, guide and all other accessories.	No.	2			
B	<b>GMS Pipework, Class B</b> 50mm diameter pipework	Lm	65			15.1
C	<b>Bends</b> 50mm diameter bends	No.	10			15.7/8
D	<b>Tees</b> 50mm diameter equal Tees	No.	2			15.7/8
E	<b>Valves</b> 50mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 1952, with wheel and head joints to steel tubing.	No.	2			15.7/8
F	<b>Unions</b> 50mm diameter pipe unions	No.	12			15.7/8
A	<b>Painting</b> Allow for painting of the hose reel installation with 2 coats of super gloss paint on a primer	Item	1			15.1

	coat to the approval of the Project Engineer.					
B	<b>Standard Printed Label</b> Standard printed labels for the fire cupboards.	No.	1			15.1
C	<b>Portable Fire Extinguishers</b> Supply, deliver, install, test and commission the following portable fire extinguishers and conforming to BS EN 3 / BS 1449.					15.4
D	<b>Water/Carbon Dioxide Gas Fire Extinguisher</b> 9 litres water/carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	No	2			15.3
E	<b>Carbon Dioxide Gas Fire Extinguisher</b> 5kg carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	No	2			
<b>Total carried to collection page Mech-7</b>						
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECs REF
F	<b>Dry Chemical Powder Fire Extinguisher</b> 9kg dry chemical powder portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	No	2			15.4
G	<b>Manual Alarm Bell</b> 9" (225mm) manual operated alarm bell (Gong) to B.S 5839 (Fire detection and fire alarm systems for buildings)	No	1			15.15 15.15
	<b>Fire Blanket</b>					15.5

H	Fire blanket made of cloth woven with pre-asbestos yarn or any other fire proof material and to measure 1800 x 1210 mm. It shall be fitted with special tapes folded so as to offer instantaneous single action to release blanket from storing jacket to BS 1721.	No	1			
I	<b>Fire Notices</b> Allow for fire signage for the hose reel system, fire exits and fire instructions as described in the particular specifications and to the Project Engineer's approval B.S 5839-1 (Fire detection and fire alarm systems for buildings)	No	4			15.16

**Total carried to collection page Mech-7**

**COLLECTION PAGE FOR FIRE PROTECTION**

ITEM	DESCRIPTION	UNIT	QTY			
1	Total carried forward from page Mech-6		.....			
2	Total carried forward from page Mech-7		.....			
<b>TOTAL CARRIED FORWARD FOR FIRE PROTECTION</b>						

<b><u>SUMMARY PAGE FOR SANITARY FITTINGS, PLUMBING AND DRAINAGE WORKS</u></b>						
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>			
1	<b>TOTAL CARRIED FORWARD FOR PLUMBING AND DRAINAGE</b>		.....			
2	<b>TOTAL CARRIED FORWARD FOR FIRE PROTECTION</b>		.....			
<b>TOTAL FOR MECHANICAL WORKS CARRIED TO MAIN SUMMARY</b>						

# **BIO-DIGESTER UNIT**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (Kshs)	TECH. SPECSs. REF
	<b><u>BIODIGESTER UNIT</u></b>					
	<u>Site Clearance</u>					
A	Clear site of bushes, undergrowths, small trees and grub up their roots including removal from site as directed	SM	17			3.3 & 3.4
	<u>Excavations.</u>					
B	Excavate pit for bio digester tank not exceeding 1.5m depth starting from ground level. Average depth 1.5m	CM	26			3.5
C	Ditto exceeding 1.5m but not exceeding 3.0m deep.	CM	17			3.5
D	Provide material, mix and place 50mm thick class 20 concrete blinding.	SM	17			4.1-4.21
E	Provide material, Insitu reinforced concrete class 25/20: vibrated bio digester tank bottom slab.	CM	3			4.1-4.21
F	200mm thick natural stone septic tank walling.	SM	48			5.6
G	Provide materials, Insitu reinforced concrete class 25/20: vibrated: inlet and outlet manhole bottom bases.	CM	1			4.1-4.21
H	Provide material, Insitu reinforced concrete class 25/20: vibrated top slab of septic tank.	CM	3			4.1-4.21

	<u>Reinforcement</u>					
I	Provide fix in position $\varnothing$ 10/8mm bars including bending, tying wires any spacer blocks in septic tank baffle walls.	KG	180			4.22-4.26
	Total Carried Forward					

	<b>Total Brought Forward</b>					
	<b><u>Tank Finishing</u></b>					
A	Provide material, mix and apply 15mm thick waterproofed cement/sand (1:3) rendering to walls; all to approval.	SM	45			10.1-10.4
B	Provide material and apply 25mm thick waterproofed screed to top and bottom slab	SM	35			10.1-10.4
C	Provide and fix 600x450mm medium duty manhole covers and frames; all to approval.	NO	4			15.13
D	Provide and fix 100mm heavy duty pipes and piping; all to approval.	LM	16			15.7-15.8
	<b><u>Formwork</u></b>					
E	Provide and fix Marine boards' formwork to soffits of slab.	SM	17			4.28-4.31
F	Provide and fix sawn timber formwork to edges 75 to 150mm.	LM	19			4.28-4.31
	<b><u>Distribution Manholes.</u></b>					4.1-4.21
G	Provide material and construct manholes with all necessary 100mm pipes and connection medium duty manhole covers and frames including all necessary excavations, formwork, backfilling and disposal of surplus material; all to approval.	NO	2			15.14
	<b><u>3No. Soak Pits.</u></b>					3.5 &3.7&3.9
H	Excavate for soak pits exceeding 1.5m deep but not exceeding 3.0m deep starting from ground level and backfilling after construction of 100mm masonry wall ;all to approval..	CM	37			3.5

I	Provide material and fill in the soak pits with blocks of stones as hardcore average thickness 150mm to 200mm; all to approval.	CM	90			3.9
J	Provide for bacterial enzymes starter material:	Litres	40			15.12
	<b>TOTAL BIODIGESTER CARRIED TO SUMMARY</b>					

# CONSTRUCTION OF ENA FRESH PRODUCE MARKET

## MAIN SUMMARY

ITEM	DESCRIPTION	AMOUNT (KSHS)
1	PRELIMINARIES	
2	BUILDER'S WORK	
3	PLATFORMS	
4	ELECTRICAL WORKS	
5	CIVIL WORKS	
6	MECHANICAL WORKS	
7	BIODIGESTER UNIT	
	<b>SUB-TOTAL 01</b>	
	<b>TOTAL CARRIED TO FORM OF TENDER</b>	

AMOUNT IN WORDS:.....

NAME OF THE CONTRACTOR:.....

STAMP :

SIGN : .....

**Prepared by:**

Department of Public Works

P.O. Box 29- EMBU.

EMBU COUNTY

# 1. Schedule of Payment Currencies

For \_\_\_\_\_ *[insert name of Section of the Works]*

Separate tables may be required if the various sections of the Works (or of the Bill of Quantities) will have substantially different foreign and local currency requirements. The Employer should insert the names of each section of the Works.

	A	B	C	D
<b>Name of Payment Currency</b>	<b>Amount of Currency</b>	<b>Rate of Exchange to Local Currency</b>	<b>Local Currency Equivalent</b> $C = A \times B$	<b>Percentage of Total Bid Price (TBP)</b> $\frac{100 \times C}{TBP}$
<b>Local currency</b> _____		<b>1.00</b>		
<b>Foreign Currency #1</b> _____				
<b>Foreign Currency #2</b> _____				
<b>Foreign Currency #3</b> _____				
<b>Total Bid Price</b>				<b>100.00</b>
<b>Provisional Sums Expressed in Local Currency</b>		<b>1.00</b>		
<b>TOTAL BID PRICE (Including provisional sum)</b>				

## 2. Schedule(s) of Adjustment Data (Not Applicable)

**Table A - Local Currency**

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Local Currency Amount	Bidder's Proposed Weighting
	Nonadjustable	—	—	—	A: _____* B: _____* C: _____* D: _____* E: _____*
			<b>Total</b>		<b>1.00</b>

[\* To be entered by the Employer. Whereas “A” should a fixed percentage, B, C, D and E should specify a range of values and the Bidder will be required to specify a value within the range such that the total weighting = 1.00]

**Table B - Foreign Currency**

Name of Currency: \_\_\_\_\_

If the Bidder wishes to quote in more than one foreign currency, this table should be repeated for each foreign currency.

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Currency in Type/Amount	Equivalent in FC1	Bidder's Proposed Weighting
	Nonadjustable	—	—	—		A: _____* B: _____* C: _____* D: _____* E: _____*
				<b>Total</b>		<b>1.00</b>

[\* To be entered by the Employer. Whereas “A” should a fixed percentage, B, C, D and E should specify a range of values and the Bidder will be required to specify a value within the range such that the total weighting = 1.00]

# Forms of Bid Security

## Form of Bid Security - Bank Guarantee

*[Guarantor letterhead or SWIFT identifier code]*

**Beneficiary:**

*[Insert name and address of the Employer]*

**Request for Bids No:** *\_[Insert reference number for the Request for Bids]*

**Date:** *[Insert date of issue]*

**BID GUARANTEE No.:** *[Insert guarantee reference number]*

**Guarantor:** *\_[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of *[insert description of contract]* under Request for Bids No. *[insert number]* ("the RFB").

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

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

- (a) has withdrawn its Bid prior to the Bid validity expiry date specified by the Applicant in the Letter of Bid, or any extended date provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary prior to the expiry date of the Bid validity or any extension thereto provided by the Applicant, (i) fails to execute the contract agreement or (ii) fails to furnish the performance security and, if required, the Environmental and Social (ES) Performance Security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security and, if

required, the Environmental and Social (ES) Performance Security, issued to the Beneficiary in relation to such contract agreement; and (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the expiry date of the Bid validity.

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

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

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*[signature(s)]*

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

# FORM PER -1

## Key Personnel Schedule

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

### Key Personnel

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

	<b>Duration of appointment:</b>	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	<b>Time commitment for this position:</b>	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	<b>Expected time schedule for this position:</b>	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
<b>5.</b>	<b>Title of position: Sexual Exploitation, Abuse and Harassment Expert</b>	
	<i>[Where a Project SEA risks are assessed to be substantial or high, Key Personnel shall include an expert with relevant experience in addressing sexual exploitation, sexual abuse and sexual harassment cases]</i>	
	<b>Name of candidate</b>	
	<b>Duration of appointment:</b>	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	<b>Time commitment for this position:</b>	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	<b>Expected time schedule for this position:</b>	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
<b>6.</b>	<b>Title of position:</b> <i>[insert title]</i>	
	<b>Name of candidate</b>	
	<b>Duration of appointment:</b>	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	<b>Time commitment for this position:</b>	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	<b>Expected time schedule for this position:</b>	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

**Form PER-2:  
Resume and Declaration  
Key Personnel**

<b>Name of Bidder</b>
-----------------------

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

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

<b>Project</b>	<b>Role</b>	<b>Duration of involvement</b>	<b>Relevant experience</b>
<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 undersigned Key Personnel, certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

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

<b>Commitment</b>	<b>Details</b>
<b>Commitment to duration of contract:</b>	<i>[insert period (start and end dates) for which this Key Personnel is available to work on this contract]</i>
<b>Time commitment:</b>	<i>[insert the number of days/week/months/ that this Key Personnel will be engaged]</i>

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

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

**Name of Key Personnel:** *[insert name]*

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

**Countersignature of authorized representative of the Bidder:**

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

## Equipment

The Bidder 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 Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (\*) shall be used for evaluation.

<b>Type of Equipment*</b>	
<b>Equipment Information</b>	<b>Name of manufacturer,</b>
	<b>Capacity*</b>
<b>Current Status</b>	<b>Model and power rating</b>
	<b>Year of manufacture*</b>
<b>Source</b>	<b>Current location</b>
	<b>Details of current commitments</b>
<b>Indicate source of the equipment</b> <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

The following information shall be provided only for equipment not owned by the Bidder.

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

## **Site Organization**

*[insert Site Organization information]*

## **Method Statement**

*[insert Method Statement]*

## **Mobilization Schedule**

*[insert Mobilization Schedule]*

## **Construction Schedule**

*[insert Construction Schedule]*

## **ES Management Strategies and Implementation Plans**

### **(ES-MSIP)**

The Bidder shall submit comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) as required by ITB 11.1 (i) of the Bid Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including those as may be more fully described in the Works Requirements in Section VII.

**This form should only be submitted by successful bidder. The ESIA report will be provided by the employer.**

## Code of Conduct for Contractor’s Personnel (ES) Form

**Note to the Employer:**

*The following minimum requirements shall not be modified. The Employer may add additional requirements to address identified issues, informed by relevant environmental and social assessment.*

*The types of issues identified could include risks associated with: labor influx, spread of communicable diseases, and Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH) etc.*

**Delete this Box prior to issuance of the bidding documents.**

**Note to the Bidder:**

**The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified.** However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

### CODE OF CONDUCT FOR CONTRACTOR’S PERSONNEL

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Employer] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, laborers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as “**Contractor’s Personnel**” and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor’s Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

#### REQUIRED CONDUCT

Contractor’s Personnel shall:

1. carry out his/her duties competently and diligently;

2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
  - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
  - b. wearing required personal protective equipment;
  - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
  - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
11. report violations of this Code of Conduct; and
12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

## **RAISING CONCERNS**

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract,*

*another individual designated by the Contractor to handle these matters]* in writing at this address [ ] or by telephone at [ ] or in person at [ ]; or

2. Call [ ] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

### **CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT**

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

#### **FOR CONTRACTOR'S PERSONNEL:**

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

### **ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)**

## **ATTACHMENT 1 TO THE CODE OF CONDUCT FORM**

### **BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)**

The following non-exhaustive list is intended to illustrate types of prohibited behaviors:

(1) **Examples of sexual exploitation and abuse** include, but are not limited to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) **Examples of sexual harassment in a work context**

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

## Others

## **Bidder's Qualification**

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

## Form ELI -1.1: Bidder Information Form

Date: \_\_\_\_\_  
RFB No. and title: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_ pages

Bidder's name
In case of Joint Venture (JV), name of each member:
Bidder's actual or intended country of registration: <i>[indicate country of Constitution]</i>
Bidder's actual or intended year of incorporation:
Bidder's legal address [in country of registration]:
Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <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 ITB 4.4. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"><li>• Legal and financial autonomy</li><li>• Operation under commercial law</li><li>• Establishing that the Bidder is not under the supervision of the Employer</li></ul>
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 47.1, the successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]</i>

## Form ELI -1.2: Information Form for JV Bidders

(to be completed for each member of Joint Venture)

Date: \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

Bidder's Joint Venture 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 <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and is not under the supervision of the Employer, in accordance with ITB 4.6. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 47.1, the successful Bidder shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.]</i>

## Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Joint Venture Member's Name \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> Contract non-performance did not occur since 1 <sup>st</sup> January <i>[insert year]</i> <input type="checkbox"/> Contract(s) not performed since 1 <sup>st</sup> January <i>[insert year]</i>			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and KShEquivalent)
<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 Employer: <i>[insert full name]</i> Address of Employer: <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			
<input type="checkbox"/> No pending litigation <input type="checkbox"/> Pending litigation.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), USD Equivalent (exchange rate)
		Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: ____  Status of dispute: _____	
		Contract Identification: Name of Employer: Address of Employer: 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 <input type="checkbox"/> Litigation History			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), USD 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 Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

## Form CON – 3: Environmental and Social Performance Declaration

*[The following table shall be filled in for the Bidder, each member of a Joint Venture and each Specialized Subcontractor]*

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member's or Specialized Subcontractor's Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

Page *[insert page number]* of *[insert total number]* pages

### Environmental and Social Performance Declaration

in accordance with Section III, Qualification Criteria, and Requirements

- No suspension or termination of contract:** An employer has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental, or Social (ES) performance since the date specified in Section III, Qualification Criteria, and Requirements, Sub-Factor 2.5.
- Declaration of suspension or termination of contract:** The following contract(s) has/have been suspended or terminated and/or Performance Security called by an employer(s) for reasons related to Environmental, or Social (ES) performance since the date specified in Section III, Qualification Criteria, and Requirements, Sub-Factor 2.5. Details are described below:

Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and Ksh equivalent)
		Contract Identification: Name of Employer: Address of Employer: Reason(s) for suspension or termination:	
		Contract Identification: Name of Employer: Address of Employer: Reason(s) for suspension or termination:	
...	...		...

#### Performance Security called by an employer(s) for reasons related to ES performance

Year	Contract Identification	Total Contract Amount (current value, currency, exchange rate and Ksh equivalent)
	Contract Identification:	

	Name of Employer: Address of Employer: Reason(s) for calling of performance security: <i>[s) e.g. for gender-based violence; sexual exploitation, or sexual abuse breaches]</i>	

# Form CON – 4

## Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment Performance Declaration

*[The following table shall be filled in by the Bidder, each member of a Joint Venture and each subcontractor proposed by the Bidder]*

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member's or Subcontractor's Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

Page *[insert page number]* of *[insert total number]* pages

<b>SEA and/or SH Declaration</b> in accordance with Section III, Evaluation and Qualification Criteria
<p>We:</p> <p><input type="checkbox"/> (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations</p> <p><input type="checkbox"/> (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations</p> <p><input type="checkbox"/> (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.</p> <p><input type="checkbox"/> (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA/ SH obligations.</p> <p><input type="checkbox"/> (e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached evidence demonstrating that we have adequate capacity and commitment to comply with SEA/ SH obligations.</p>
<i>[If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]</i>
<i>[If (d) or (e) above are applicable, provide the following information:]</i>
Period of disqualification: From: _____ To: _____
If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/ SH obligations (as per (d) above) <p style="margin-left: 20px;">Name of Employer: _____</p> <p style="margin-left: 20px;">Name of Project: _____</p> <p style="margin-left: 20px;">Contract description: _____</p> <p style="margin-left: 20px;">Brief summary of evidence provided: _____</p> <p style="margin-left: 20px;">_____</p>

Contact Information: (Tel, email, name of contact person): \_\_\_\_\_  
\_\_\_\_\_

As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/ SH obligations (**as per (e) above**) [*attach details as appropriate*].

## Form CCC: Current Contract Commitments / Works in Progress

Bidders and each member of 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.

Name of contract	Employer, contact address/telephone	Value of outstanding work (current Ksh equivalent)	Estimated completion date	Average monthly invoicing over last six months Ksh/month)
1.				
2.				
3.				
4.				
5.				
etc.				

## Form FIN – 3.1: Financial Situation and Performance

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Joint Venture Member's Name \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

### 1. Financial data

Type of Financial information in (currency)	Historic information for previous _____ years, (amount in currency, currency, exchange rate, Ksh 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					

## 2. Sources of Finance

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

No.	Source of finance	Amount Ksh equivalent)
1		
2		
3		

## 3. Financial documents

The Bidder and its parties shall provide copies of financial statements for three years (From 1<sup>st</sup> January 2021 to 31<sup>st</sup> December 2023) pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.2. The financial statements shall:

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

Attached are copies of financial statements<sup>3</sup> for the three years (From 1<sup>st</sup> January 2021 to 31<sup>st</sup> December 2023) required above; and complying with the requirements

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<sup>3</sup> If the most recent set of financial statements is for a period earlier than 12 months from the date of bid, the reason for this should be justified.

## Form FIN - 3.2: Average Annual Construction Turnover

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Joint Venture Member's Name \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

		<b>Annual turnover data (construction only)</b>	
<b>Year</b>	<b>Amount Currency</b>	<b>Exchange rate</b>	<b>Ksh equivalent</b>
<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.

### Form FIN - 3.3: Financial Resources

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

Source of financing	Amount (KSH equivalent)
1.	
2.	
3.	
4.	

## Form EXP - 4.1: General Construction Experience

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Joint Venture Member's Name \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

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

## Form EXP - 4.2(a): Specific Construction and Contract Management Experience

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Joint Venture Member's Name \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

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			KSH*	
If member in a JV or subcontractor, specify participation in total Contract Amount			*	
Employer's Name:				
Address:				
Telephone/fax number				
E-mail:				

**Form EXP - 4.2(a) (cont.)**  
**Specific Construction and Contract Management Experience**  
**(cont.)**

<b>Similar Contract No.</b>	<b>Information</b>
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	

## Form EXP - 4.2(b): Construction Experience in Key Activities

Bidder's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Joint Venture Member's Name \_\_\_\_\_

Subcontractor's Name<sup>4</sup> (as per ITB 34.2 and 34.3): \_\_\_\_\_

RFB No. and title: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

Subcontractor's Name (as per ITB 34.2 and 34.3): \_\_\_\_\_

All subcontractors for key activities must complete the information in this form as per ITB 34.2 and 34.3 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: \_\_\_\_\_

	<b>Information</b>			
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			Ksh	
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				
Employer's Name:				

<sup>4</sup> If applicable.

Address:	
Telephone/fax number	
E-mail:	

	<b>Information</b>
Employer's Name:	
Address:	
Telephone/fax number	
E-mail:	

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

2. Activity No. Two

3. ....

## Form EXP - 4.2(c): Specific Experience in Managing ES aspects

*[The following table shall be filled in for contracts performed by the Bidder, and each member of a Joint Venture]*

Bidder's Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Bidder's JV Member Name: \_\_\_\_\_  
 RFB No. and title: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_ pages

1. Key Requirement no 1 in accordance with 4.2 (c): \_\_\_\_\_

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"/>	Subcontractor <input type="checkbox"/>
Total Contract Amount			Ksh	
Details of relevant experience				

2. Key Requirement no 2 in accordance with 4.2 (c): \_\_\_\_\_

3. Key Requirement no 3 in accordance with 4.2 (c): \_\_\_\_\_

4. ...

## **Section V - Eligible Countries**

### **Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement**

In reference to ITB 4.8, and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8 (a) and 5.1 **None**

Under ITB 4.8 (b) and 5.1 **None**

# Section VI - Fraud and Corruption

(Section VI shall not be modified)

## 1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

## 2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (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, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, 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:
    - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation 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

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank 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;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;<sup>1</sup> (ii) to be a nominated<sup>2</sup> sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect<sup>3</sup> all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

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

<sup>2</sup> A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

<sup>3</sup> Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

## **PART 2 - Works' Requirements**

# Section VII - Works' Requirements

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## Environmental and Social Requirements

Sub- Clause/Clause No.	Sub-Clause/Clause	Remarks
8.2	Other Contractors	The contractor shall comply with environmental and social assessment that has been carried out by the employer
9.4.1, 9.4.2, 9.4.7, 9.4.8	SEAH prevention and control	The contractor shall prepare and implement a Sexual Exploitation and Harassment (SEAH) Prevention and Response Plan, to manage the risks of gender-based violence (GBV) and sexual exploitation and abuse (SEA) for both components.
9.4.6	Facilities for Staff and Labor	The contractor shall provide personal protective equipment and shall take all measures or actions for the protection and safety of contractor's personnel. Referral pathways shall be displayed for ease of access and personnel sensitized on the same The Contractor shall develop a Labour Management Plan in line with existing regulations and Laws
9.4.20	Training of Contractor's Personnel	As set out in the ESCP, the Contractor shall conduct training to relevant Contractor's Personnel on environmental and social aspects.
15.2	Contractor to Construct the Works	If the Contract specifies that the Contractor shall design any part of the Permanent Works, state any applicable technical standards and requirements including to address: <ul style="list-style-type: none"> <li>• climate change considerations,</li> <li>• universal access,</li> <li>• risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events, applicable certification or approval requirements</li> </ul> [ Refer to ESS4 on requirements for design]
18.2	Health and Safety Obligations	All safety, health, environmental, social and other notices shall be clearly displayed and written in English and vernacular with all the

Sub- Clause/Clause No.	Sub-Clause/Clause	Remarks
		instructions and procedures
18.3	Protection of the Environment	The contractor shall be knowledgeable of and comply with the Environmental and Social Management plan and with all environmental laws, rules, regulations for materials including hazardous materials or wastes under his control. The contractor shall not dump, release or otherwise discharge or dispose of any such materials without the authorization of the Engineer. The contractor shall take proper precautionary measures to counter any known environmental, social or health hazards associated with such release.
19.1	Archeological and Geological Findings	All chance finds should be reported immediately to the employer Archeological and geological sites should be avoided for all projects in accordance with the ESF – ESS8
29.1	Security of the Site	Safety barriers shall be provided to the perimeter of the working areas, all excavations and to existing pits .no work shall commence until all safety barriers are in place in accordance with (ESS4 of the ESF states the principles of proportionality, GIIP and applicable laws.) Include any other requirement set out in the ESCP.

In addition to provisions in the above table, the Employer shall specify the following as applicable.

#### **Management and Safety of Hazardous Materials**

Hazardous materials shall be stored in approved safety containers and handled in a manner specified by the manufacturers and /or prescribed authorities.

Only properly trained and equipped personnel shall handle hazardous materials as per ESF - ESS4

#### **Resource Efficiency and Pollution Prevention and Management**

As applicable specify Resource Efficiency and Pollution Prevention and Management measures (see ESF - ESS3 and relevant guidance notes).

- **Resource efficiency**

The Employer shall specify, as applicable, measures for improving efficient consumption of energy, water and raw materials, as well as other resources.

- **Energy:** When the Works have been assessed to involve a potentially significant use of energy, specify any applicable measures to optimize energy usage.
- **Water:** When the Works have been assessed to involve a potentially significant use of water or will have potentially significant impacts on water quality, specify any applicable measures that avoid or minimize water usage so that the Works' water use does not have significant adverse impacts on communities, other users and the environment.
- **Raw material:** When the Works have been assessed to involve a potentially significant use of raw materials, specify any applicable measures to support efficient use of raw materials.
- **Pollution prevention and management**
  - Management of air pollution: the Contractor shall take all necessary measures to limit pollution from dust and any wind-blown materials during the works , including damping down with water on a regular basis during dry climatic conditions. All trucks leaving the site shall be properly covered to prevent discharge.
  - specify any measure to avoid or minimize Works related air pollution. See also GCC Sub-Clause 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.
  - **Management of hazardous and nonhazardous wastes:** specify any applicable measures to minimize the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment including storage, transportation and disposal of hazardous wastes. See also GCC Sub-Clauses 18.2 and 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.
  - **Management of chemicals and hazardous materials:** specify any applicable measures to minimize and control the release and use of hazardous materials for Works activities including the production, transportation, handling, and storage of the materials. See also GCC Sub-Clauses 18.2 and 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.
- **Biodiversity Conservation and Sustainable Management of Living Natural Resources**

The Employer shall specify, as applicable, Biodiversity Conservation and Sustainable Management of Living Natural Resources (see ESF - ESS6 and relevant guidance notes). This includes, as applicable:

- invasive alien species: managing the risk of invasive alien species during the execution of the Works;
- sustainable management of living natural resources; and
- certification and verification requirements for the supply of natural resource materials where there is a risk of significant conversion or significant degradation of natural or critical habitats.
- The employer shall identify and disclose to the bidder all areas that are ecologically important and sensitive

See also GCC Sub-Clause 18.3 and the table above on Conditions of Contract that make reference to ES matters in the Specification.

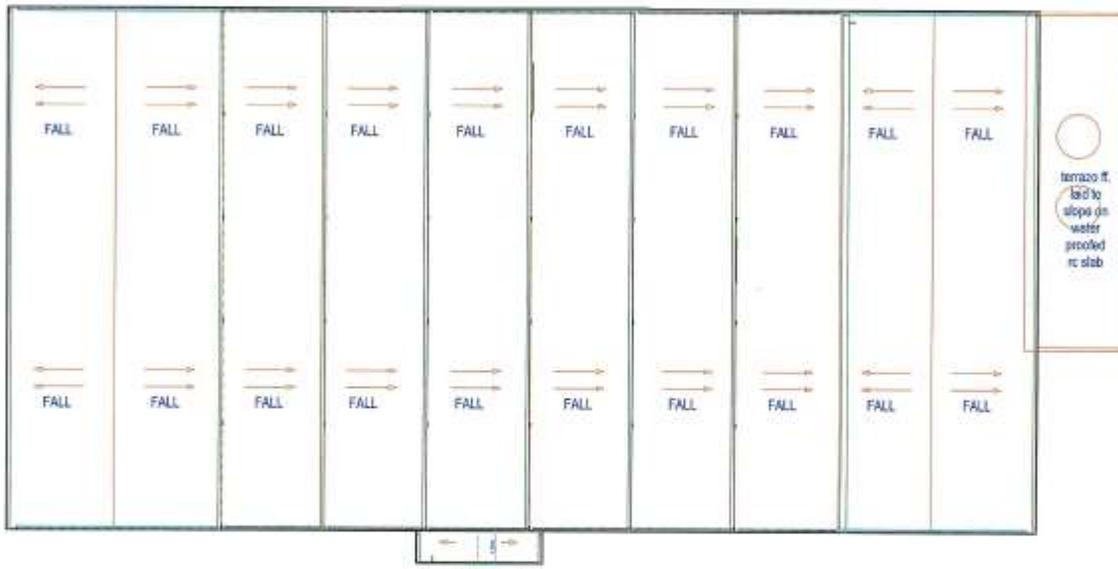
- **Road Safety**
  - State any specific traffic and road safety requirement, as applicable. See also Sub-Clause 9.3 of the General Conditions of Contract. For details, refer to the Guidance Note on Road safety.

## Key Personnel

No	Position	Requirements/Qualification	Minimum similar work Experience (years)
1	Site Agent	Bachelor's degree in a construction related field and registered with relevant professional bodies (Board of Registration of Architects and Quantity Surveyors (BORAQS), Engineer's Board of Kenya (EBK), Institute Surveyors of Kenya (ISK) or equivalent	4
2	Site supervisor	Bachelor's degree in a construction related field and registered with the relevant professional bodies (Board of Registration of Architects and Quantity Surveyors (BORAQS), Engineer's Board of Kenya (EBK), Institute Surveyors of Kenya (ISK) or equivalent	4
3	Foreman	Diploma in Civil Engineering/Building/Construction or equivalent	4
4	Environmental Health and safety expert	BSc. Environmental Management or equivalent Registration with DOSHS	3
5	Mason (3No.)	Artisan Certificate/Diploma in Masonry/Building Construction from a recognized technical institution.	3
6	Welders (3No.)	Artisan Certificate/Diploma in Welding from a recognized technical institution.	3
7	Electrician (2 No.)	Artisan Certificate/Diploma in Electrical installation from a recognized technical institution.	3
8	Plumber (2No.)	Artisan Certificate/Diploma in plumbing from a recognized technical institution.	3







**ROOF PLAN**

DAVID KISELI & PARTNERS  
 Regd Architect no. 1112  
 09 FEB 2013  
 P.O. BOX 7150-00100  
 NAIROBI

01/13

**GENERAL**  
 All dimensions are unless otherwise specified.  
 Workings are to include, but not be limited to, material wastage.  
 The contractor shall be solely responsible for the accuracy of all dimensions.

**CONSTRUCTION**  
 All work shall be done in accordance with the approved drawings.  
 All materials shall be of the best quality and shall be approved by the engineer.  
 All work shall be done in accordance with the approved drawings.

**COOK**  
 All work shall be done in accordance with the approved drawings.

**STRUCTURAL**  
 All dimensions shall be in accordance with the approved drawings.  
 All work shall be done in accordance with the approved drawings.

**FINISHES**  
 All work shall be done in accordance with the approved drawings.

**REVISIONS**

Project: CONSTRUCTION OF SVA MARKET

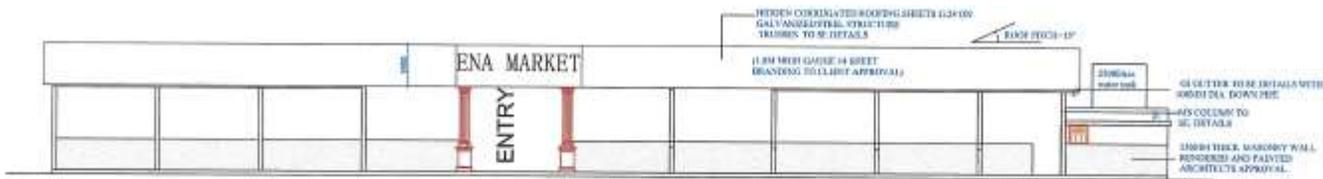
Drawing Title: SECTIONS

Application: Architectural  
 Class: DRAWINGS

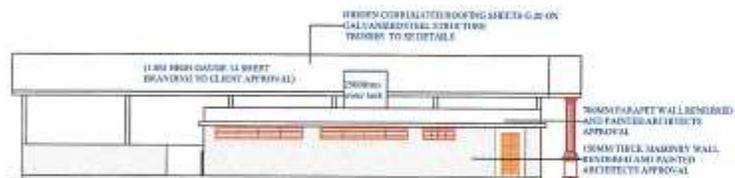
Project No.:  
 Date: 09 FEB 2013

Rev.	Desc.	By	Date
1			

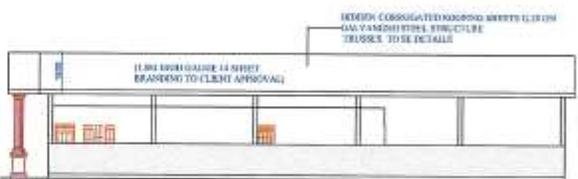
DIRECTORATE OF PUBLIC WORKS  
 NAIROBI COUNTY  
 ARCHITECTURAL DEPARTMENT  
 P.O. BOX 7150-00100  
 NAIROBI



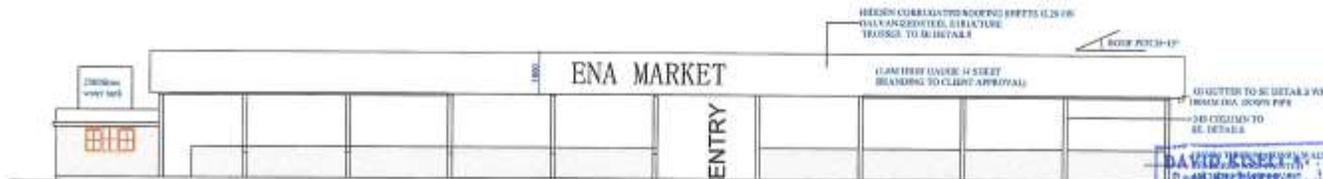
**ELEVATION 01**



**ELEVATION 02**



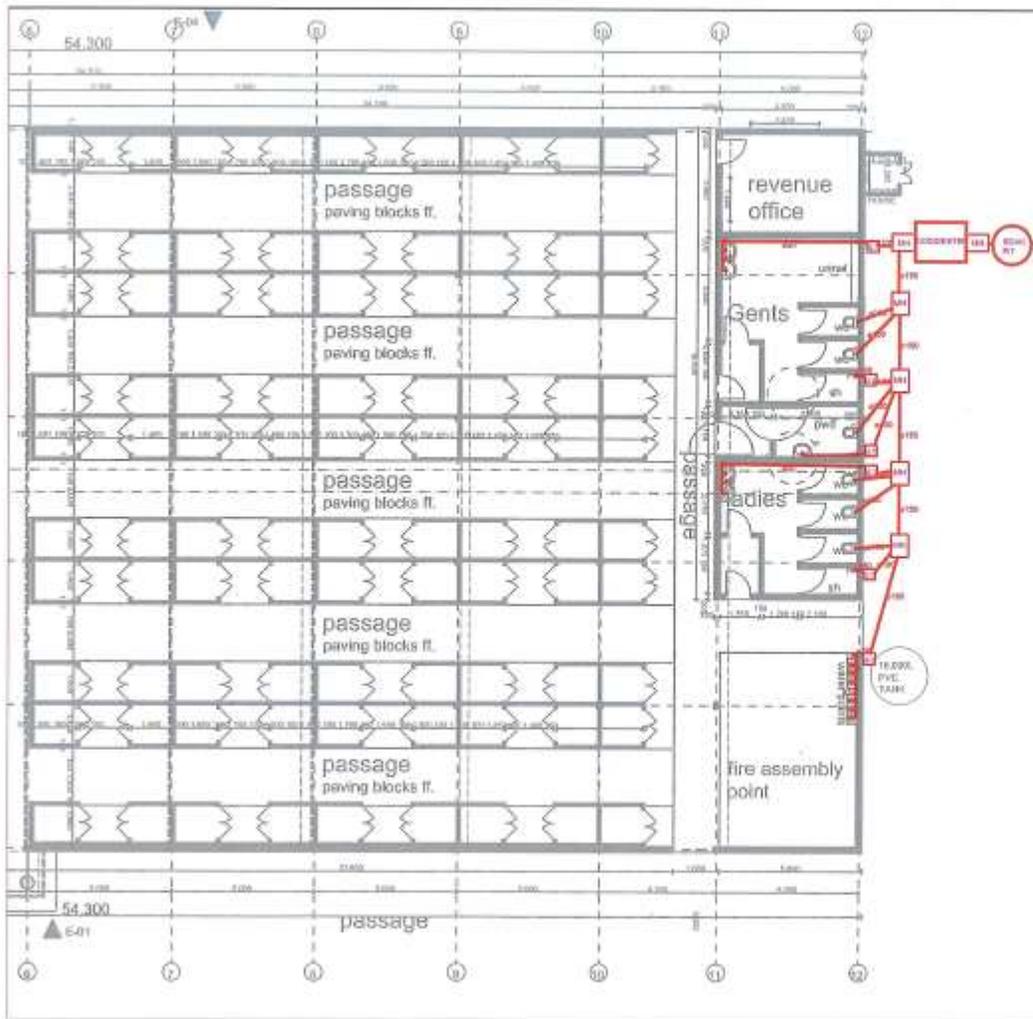
**ELEVATION 03**



**ELEVATION 04**

DAVID KISHOR KHOSLA  
 15/57  
 05 SEP 2013  
 Sign: [Signature]  
 POK POK FRIDGE - 06300  
 JAIPUR

<b>TITLE</b>	
<b>GENERAL</b>	
<p>All dimensions in feet unless otherwise specified. Showing in metric units, will depend on the scale. The contractor shall verify all dimensions before commencement of any work.</p> <p><b>CONSTRUCTION</b></p> <p>All work shall be done in accordance with the approved drawings. All work shall be done in accordance with the approved drawings. All work shall be done in accordance with the approved drawings.</p> <p><b>CEILING</b></p> <p>All ceiling work shall be done in accordance with the approved drawings. All work shall be done in accordance with the approved drawings.</p> <p><b>STRUCTURAL</b></p> <p>All structural work shall be done in accordance with the approved drawings. All work shall be done in accordance with the approved drawings.</p> <p><b>FINISHES</b></p> <p>All finishes shall be done in accordance with the approved drawings. All work shall be done in accordance with the approved drawings.</p> <p><b>GENERAL</b></p> <p>All work shall be done in accordance with the approved drawings. All work shall be done in accordance with the approved drawings.</p>	
<b>EXTENSION</b>	
Project: CONSTRUCTION OF ENA MARKET	
Drawing Title: ELEVATIONS	
Application: Additional	
Class: Preliminary	
Prepared By: [Name]	Drawn By: [Name]
Checked By: [Name]	Approved By: [Name]
Date: [Date]	Scale: [Scale]
Sheet No: [Number]	Total Sheets: [Number]
Drawn By: [Name]	Checked By: [Name]
Approved By: [Name]	Date: [Date]
CORPORATION OF PUBLIC WORKS RAJASTHAN ARCHITECTURAL DEPARTMENT POK POK FRIDGE - 06300 JAIPUR	



**NOTES**

1. All dimensions in millimetres unless otherwise stated.
2. All valves to be of brass /brass heavy pattern
3. Water pipes under floor slab/structure, railway, carpark etc to be sleeved in heavy duty pvc pipe and encased in 150mm concrete around
4. All drainage pipework shall be medium galvanized D.

LEGEND	
1	1000L PVC TANK
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16	1000L PVC TANK
17	1000L PVC TANK
18	1000L PVC TANK

REVISIONS		
NO.	DESCRIPTION	DATE

**Project:**  
EMA FRESH PRODUCE MARKET

**Client:**  
EMBU COUNTY GOVERNMENT

**Title:**  
DRAINAGE LAYOUT

NO.	DATE	DESCRIPTION	DATE

**DIRECTORATE OF PUBLIC WORKS (EMBU COUNTY)**

MAKES AND PUBLISHES RECORDS FOR AND ON BEHALF OF THE GOVERNMENT OF THE REPUBLIC OF KENYA

DAVID KISELI & PARTNERS  
Regd Architect No. A1124  
★ 05 FEB 2013 ★  
P.O. BOX 73107 - 00200  
NAIROBI

DAVID KISELI & PARTNERS  
Architects No. A1124  
★ 05 FEB 2013 ★  
P.O. BOX 73107 - 00200  
NAIROBI



### 3D PERSPECTIVES



DAVID KISELI & NYISA  
 Regd Architect No. 31127  
 \* 05 FEB 2013 \*  
 Sign: [Signature]  
 P.O. BOX 73307 - 00200  
 NAIROBI

**NOTES**

**GENERAL**

All dimensions are in meters unless otherwise specified. Drawings are not to be scaled and dimensions are to prevail over dimensions indicated on drawings.

**CONTRACTOR'S OBLIGATIONS**

All site preparation work to be carried out in accordance with the approved site plan and drawings.

**WORK**

All work to be carried out in accordance with the approved drawings and specifications.

**STRUCTURAL**

All structural work to be carried out in accordance with the approved drawings and specifications.

Depth of foundations to be determined by soil report.

All works to be completed within the approved time schedule.

All works to be completed within the approved time schedule.

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All works to be completed within the approved time schedule.

**REVISIONS:**

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Project: CONSTRUCTION OF EBA MARKET

Drawing Title: 3D PERSPECTIVES

Application: [Blank]

Date: 05 FEB 2013

Project No: [Blank]

Scale: 1:100

Sheet: [Blank]

Client: [Blank]

Contractor: [Blank]

Architect: [Blank]

Engineer: [Blank]

Date: 05 FEB 2013

Directorate of Public Works

ARCHITECTURAL DEPARTMENT

FOR APPROVAL OF THE SUPERVISOR

OF A PROJECT AT [Blank]

[Signature]

### 3D PERSPECTIVES

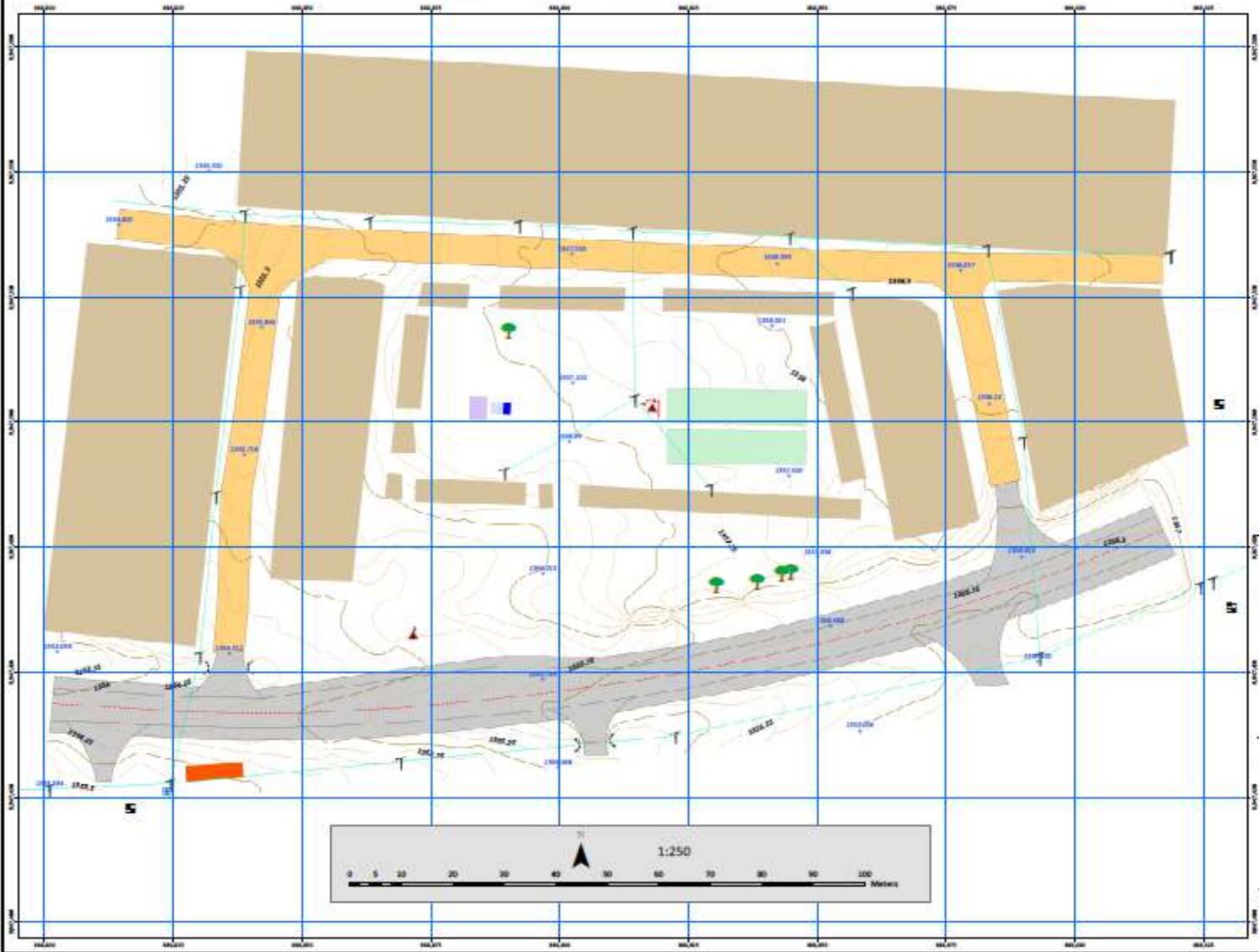


DAVID KISELI & MISA  
 Regd Architects no. 11121  
 ★ 05 FEB 2013  
 SIGNATURE  
 P.O. BOX 73107 - 00202  
 NAIROBI

<p><b>GENERAL</b></p> <p>All dimensions to be given unless specified. Everying on same level, unless otherwise stated.</p> <p>The contractor must check and verify all dimensions before commencement of any work.</p> <p><b>CONSTRUCTION</b></p> <p>All work must be carried out in accordance with the specifications and standards of the relevant authorities.</p> <p><b>CEILING</b></p> <p>All work on the ceiling must be carried out in accordance with the specifications and standards of the relevant authorities.</p> <p><b>STRUCTURAL</b></p> <p>All work must be carried out in accordance with the specifications and standards of the relevant authorities.</p> <p>Use of S.C. work must be in accordance with the specifications and standards of the relevant authorities.</p> <p>Diaphragms must be provided in all buildings and ground floors.</p> <p>All buildings must be designed to resist wind loading in accordance with the specifications and standards of the relevant authorities.</p> <p>All buildings must be designed to resist seismic loading in accordance with the specifications and standards of the relevant authorities.</p> <p>All buildings must be designed to resist fire loading in accordance with the specifications and standards of the relevant authorities.</p> <p><b>FINISHES</b></p> <p>All finishes must be in accordance with the specifications and standards of the relevant authorities.</p> <p>All buildings must be designed to resist corrosion in accordance with the specifications and standards of the relevant authorities.</p>							
<p><b>REVISIONS</b></p> <table border="1"> <tr> <th>No.</th> <th>Description</th> </tr> <tr> <td> </td> <td> </td> </tr> </table>		No.	Description				
No.	Description						
<p>Project: CONSTRUCTION OF ENA MARKET</p>							
<p>Drawing Title: ELEVATIONS</p>							
<p>Application: ARCHITECTURE</p>							
<p>Class: DEMOLITION</p>							
<p>Project No. 11121</p>							
<p>Scale: 1:100</p>							
<table border="1"> <tr> <th>No.</th> <th>Issue</th> <th>Date</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		No.	Issue	Date			
No.	Issue	Date					
<p>INSPECTOR GENERAL OF PUBLIC WORKS          BUREAU OF ARCHITECTURE          ARCHITECTURAL DEPARTMENT          1st FLOOR, OFFICE OF THE SECRETARY          OFFICE OF THE SECRETARY</p>							



# TOPOGRAPHICAL MAP OF ENA MARKET - EMBU COUNTY



- Legend**
- TREE
  - GATE VALVE
  - FLOOD LIGHT
  - ELECTRIC POST
  - CONTROL POINTS
  - KENHA MARKER POST
  - CULVERT
- CONTOURS**
- MAJOR CONTOUR
  - MINOR CONTOUR
  - ELECTRIC LINE
  - ROAD CENTRELINE
  - MARKET SHED
  - EMBU - MERU HIGHWAY (B6)
  - MARKET ACCESS ROAD
  - CHAMBER
  - PIT LATRINE
  - STRUCTURES
  - WATER TANK
  - WATER KIOSK
  - BODABODA SHED
  - FLOOD LIGHT CONTROL

WGS 84 UTM ZONE 37S			
Control point	Northings	Eastings	elevation
1	989702.295	388938.036	247.251
2	989707.436	388975.304	245.987

Coordinate System.....WGS84 UTM 37S  
 Contour Interval.....25 cm  
 Spot heights and.....Meters Above  
 Contour value units.....Mean Sea Level (msl)

Data Source:  
 Topographic survey was done using  
 Fofit A80 RTK, GNSS Receiver,  
 The Embu - Meru Highway (B6)  
 has a reserve of 40 m.



Published : February , 2025.  
 Version : 1



## **Supplementary Information**

**None**

**PART 3 - Conditions of Contract and Contract Forms**

## **Section VIII - General Conditions of Contract**

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

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

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

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## General Conditions of Contract

### A. General

#### 1. Definitions

Boldface type is used to identify defined terms.

- (a) The **Accepted Contract Amount** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- (b) The **Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump-sum contract. It includes a lump-sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
- (c) The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
- (d) **Bank** means the financing institution **named in the PCC**.
- (e) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
- (f) **Compensation Events** are those defined in GCC Clause 42 hereunder.
- (g) The **Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 57.1.
- (h) The **Contract** is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
- (i) The **Contractor** is the party whose Bid to carry out the Works has been accepted by the Employer.
- (j) The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer.
- (k) The **Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
- (l) **Days** are calendar days; months are calendar months.

- (m) **Dayworks** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- (n) A **Defect** is any part of the Works not completed in accordance with the Contract.
- (o) The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.
- (p) The **Defects Liability Period** is the period **named in the PCC** pursuant to GCC Sub-Clause 38.1 and calculated from the Completion Date.
- (q) **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 Employer in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (r) The **Employer** is the party who employs the Contractor to carry out the Works, **as specified in the PCC**.
- (s) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (t) "**In writing**" or "**written**" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- (u) The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.
- (v) The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The **Intended Completion Date** is specified in the PCC. The **Intended Completion Date** may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (w) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- (x) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- (y) The **Project Manager** is the person named in the PCC (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible

for supervising the execution of the Works and administering the Contract.

- (z) **PCC** means Particular Conditions of Contract.
- (aa) The **Site** is the area defined as such in the PCC.
- (bb) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (cc) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (dd) The **Start Date** is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (ee) A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (ff) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (gg) A **Variation** is an instruction given by the Project Manager which varies the Works.
- (hh) The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the PCC.
- (ii) “**Contractor’s Personnel**” refers to all personnel whom the Contractor utilizes on the Site or other places where the Works are carried out, including the staff, labor and other employees of each Subcontractor.
- (jj) “**Key Personnel**” means the positions (if any) of the Contractor’s personnel that are stated in the Specification.
- (kk) “**ES**” means Environmental and Social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH));
- (ll) “**Sexual Exploitation and Abuse**” “(SEA)” means the following:

**Sexual Exploitation** is defined as any actual or attempted abuse of position of vulnerability, differential power or

---

trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed operations/projects, sexual exploitation occurs when access to or benefit from a Bank financed Goods, Works, Non-consulting Services or Consulting Services is used to extract sexual gain;

**Sexual Abuse** is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;

- (mm) **“Sexual Harassment” “(SH)”** is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Contractor’s Personnel with other Contractor’s or Employer’s Personnel; and
- (nn) **“Employer’s Personnel”** refers to the Project Manager and all other staff, labor and other employees (if any) of the Project Manager and of the Employer engaged in fulfilling the Employer’s obligations under the Contract; and any other personnel identified as Employer’s Personnel, by a notice from the Employer or the Project Manager to the Contractor.

## 2. Interpretation

- 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
  - (a) Agreement,
  - (b) Letter of Acceptance,
  - (c) Contractor’s Bid,
  - (d) Particular Conditions of Contract,
  - (e) General Conditions of Contract, including Appendices,

- (f) Specification,
- (g) Drawings,
- (h) Bill of Quantities,<sup>1</sup> and
- (i) any other document **listed in the PCC** as forming part of the Contract.

**3. Language and Law**

- 3.1 The language of the Contract and the law governing the Contract are **stated in the PCC**.
- 3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Employer’s country when
  - (a) as a matter of law or official regulations, the Borrower’s country 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, the Borrower’s Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

**4. Project Manager’s Decisions**

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

**5. Delegation**

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

**6. Communications**

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

**7. Subcontracting**

- 7.1 The Contractor may subcontract with the approval of the Project Manager but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor’s obligations. The Contractor shall require that its Subcontractors execute the Works in accordance with the Contract, including complying with the relevant ES requirements and the obligations set out in Sub-Clause 28.1.
- 7.2 Submission by the Contractor for approval of the Project Manager, addition of any Subcontractor not named in the

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<sup>1</sup> In lump-sum contracts, delete “Bill of Quantities” and replace with “Activity Schedule.”

Contract, shall also include the Subcontractor's declaration in accordance with Appendix C- Sexual exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration

**8. Other  
Contractors**

- 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as **referred to in the PCC**. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.
- 8.2 The Contractor shall also, as stated in the Specification or as instructed by the Project Manager, cooperate with and allow appropriate opportunities for the Employer's or any other personnel, notified to the Contractor by the Employer or Project Manager, to conduct any environmental and social assessment.

## **9. Personnel and Equipment**

- 9.1 The Contractor shall employ the Key Personnel and use the Equipment identified in its Bid, to carry out the Works or other personnel and Equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and Equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 The Project Manager may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Key Personnel (if any), who:
- (a) persists in any misconduct or lack of care;
  - (b) carries out duties incompetently or negligently;
  - (c) fails to comply with any provision of the Contract;
  - (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;
  - (e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works;
  - (f) has been recruited from the Employer's Personnel;
  - (g) undertakes behavior which breaches the Code of Conduct for Contractor's Personnel (ES).

If appropriate, the Contractor shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience.

Notwithstanding any requirement from the Project Manager to remove or cause to remove any person, the Contractor shall take immediate action as appropriate in response to any violation of (a) through (g) above. Such immediate action shall include removing (or causing to be removed) from the Site or other places where the Works are being carried out, any Contractor's Personnel who engages in (a), (b), (c), (d), (e) or (g) above or has been recruited as stated in (f) above.

- 9.3 The Contractor shall take all necessary safety measures to avoid the occurrence of incidents and injuries to any third party, associated with the use of, if any, Equipment on public roads or other public infrastructure. The Contractor shall monitor road safety incidents and accidents to identify negative safety issues, and establish and implement necessary measures to resolve them.
- 9.4 Labor

9.4.1 *Engagement of Staff and Labor.* The Contractor shall provide and employ on the Site for the execution of the Works such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. 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.

Unless otherwise provided in the Contract, the Contractor shall be responsible for the recruitment, transportation, accommodation and welfare facilities in accordance with GCC Sub-Clause 9.4.6, of the Contractor's Personnel, and for all payments in connection therewith.

The Contractor shall provide the Contractor's Personnel information and documentation that are clear and understandable regarding their terms and conditions of employment. The information and documentation shall set out their rights under relevant labor laws applicable to the Contractor's Personnel (which will include any applicable collective agreements), including their rights related to hours of work, wages, overtime, compensation and benefits, as well as those arising from any requirements in the Specification. The Contractor's Personnel shall be informed when any material changes to their terms or conditions of employment occur.

9.4.2 *Conditions of Labor.* The Contractor shall inform the Contractor's Personnel about:

- (a) any deduction to their payment and the conditions of such deductions in accordance with the applicable laws or as stated in the Specification; and
- (b) their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the laws of the Country for the time being in force.

The Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws.

Where required by applicable laws or as stated in the Specification, the Contractor shall provide the Contractor's Personnel written notice of termination of employment and details of severance payments in a timely manner. The Contractor shall have paid the Contractor's Personnel (either directly or where appropriate for their benefit) all due wages and entitlements including, as applicable, social security benefits and pension contributions, on or before the end of their engagement/ employment.

- 9.4.3 The Contractor may bring into 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 Employer will, if requested by the Contractor, use its best 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.
- 9.4.4 The Contractor shall at its own expense provide the means of repatriation to and the Contractor's Personnel employed on the Contract at the Site to their various home countries. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.
- 9.4.5 *Disorderly conduct.* The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst the Contractor's Personnel.
- 9.4.6 *Facilities for Staff and Labor.* Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. If stated in the Specification, the Contractor shall give access to or provide services that accommodate the physical, social and cultural needs of the Contractor's Personnel. The Contractor shall also provide similar facilities for the Employer's Personnel if stated in the Specification.
- 9.4.7 The Contractor shall, in all dealings with the Contractor's Personnel, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor. The Contractor shall provide the Contractor's Personnel annual holiday and sick, maternity and family leave, as required by applicable laws or as stated in the Specification.
- 9.4.8 *Supply of Foodstuffs.* 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.

- 9.4.9 *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.
- 9.4.10 *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.
- 9.4.11 *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 thereto by Contractor's Personnel.
- 9.4.12 *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.
- 9.4.13 *Funeral Arrangements.* The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of its local employees who may die while engaged upon the Works.
- 9.4.14 *Forced Labor.* The Contractor, including its Subcontractors, shall not employ or engage forced labor. Forced labor 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.

No persons shall be employed or engaged who have been subject to trafficking. Trafficking in persons is defined as the recruitment, transportation, transfer, harboring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation.

- 9.4.15 *Child Labor.* The Contractor, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the national law specifies a higher age (the minimum age).

The Contractor, including its Subcontractors, shall not employ or engage a child between the minimum age and the age of 18 in a manner that 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.

The Contractor including its Subcontractors, shall only employ or engage children between the minimum age and the age of 18 after an appropriate risk assessment has been conducted by the Contractor with the Project Manager's approval. The Contractor shall be subject to regular monitoring by the Project Manager that includes monitoring of health, working conditions and hours of work.

Work considered hazardous for children is work that, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety, or morals of children. Such work activities prohibited for children include work:

- (a) with exposure to physical, psychological or sexual abuse;
- (b) underground, underwater, working at heights or in confined spaces;
- (c) with dangerous machinery, equipment or tools, or involving handling or
- (d) transport of heavy loads;
- (e) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or
- (f) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.

9.4.16 *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 project Manager.

9.4.17 *Workers' Organizations.* In countries where the relevant labor laws recognize workers' rights to form and to join workers' organizations of their choosing and to bargain collectively without interference, the Contractor shall comply with such laws. In such circumstances, the role of legally established workers' organizations and legitimate workers' representatives will be respected, and they will be provided with information needed for meaningful negotiation in a timely manner. Where the relevant labor laws substantially restrict workers' organizations, the Contractor shall enable alternative means for the Contractor's Personnel to express their grievances and

protect their rights regarding working conditions and terms of employment. The Contractor shall not seek to influence or control these alternative means. The Contractor shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organizations and collective bargaining or alternative mechanisms. Workers' organizations are expected to fairly represent the workers in the workforce.

- 9.4.18 *Non-Discrimination and Equal Opportunity.* The Contractor shall not make decisions relating to the employment or treatment of Contractor's Personnel on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment of Contractor's Personnel on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to any aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices.

Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination. The Contractor shall provide protection and assistance as necessary to ensure non-discrimination and equal opportunity, including for specific groups such as women, people with disabilities, migrant workers and children (of working age in accordance with GCC Sub-Clause 9.4.15).

- 9.4.19 *Contractor's Personnel Grievance Mechanism.* The Contractor shall have a grievance mechanism for Contractor's Personnel, and where relevant the workers' organizations stated in GCC Sub-Clause 9.4.17, to raise workplace concerns. The grievance mechanism shall be proportionate to the nature, scale, risks and impacts of the Contract. The mechanism shall address concerns promptly, using an understandable and transparent process that provides timely feedback to those concerned in a language they understand, without any retribution, and shall operate in an independent and objective manner.

The Contractor's Personnel shall be informed of the grievance mechanism at the time of engagement for the Contract, and the measures put in place to protect them against any reprisal for its use. Measures will be put in place to make the grievance mechanism easily accessible to all Contractor's Personnel.

The grievance mechanism shall not impede access to other judicial or administrative remedies that might be available, or substitute for grievance mechanisms provided through collective agreements.

The grievance mechanism may utilize existing grievance mechanisms, providing that they are properly designed and implemented, address concerns promptly, and are readily accessible to Contractor's Personnel. Existing grievance mechanisms may be supplemented as needed with Contract-specific arrangements.

9.4.20 *Training of Contractor's Personnel.* The Contractor shall provide appropriate training to relevant Contractor's Personnel on ES aspects of the Contract, including appropriate sensitization on prohibition of SEA and SH, and health and safety training referred to in GCC Sub-Clause 18.2.

As stated in the Specification or as instructed by the Project Manager, the Contractor shall also allow appropriate opportunities for the relevant Contractor's Personnel to be trained on ES aspects of the Contract by the Employer's Personnel.

The Contractor shall provide training on SEA and SH, including its prevention, to any of its personnel who has a role to supervise other Contractor's Personnel.

**10. Employer's and Contractor's Risks**

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

**11. Employer's Risks**

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

- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
  - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
  - (ii) Negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
- (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or

radioactive contamination directly affecting the country where the Works are to be executed.

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

## **12. Contractor's Risks**

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

## **13. Insurance**

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the PCC** for the following events which are due to the Contractor's risks:
- (a) loss of or damage to the Works, Plant, and Materials;
  - (b) loss of or damage to Equipment;
  - (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
  - (d) personal injury or death.
- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.

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

**14. Site Data**

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

**15. Contractor to Construct the Works**

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

15.2 If the Contract specifies that the Contractor shall design any part of the permanent Works, the Contractor shall take into the Employer's requirements which may include, if stated in the Specification:

- (a) designing structural elements of the Works taking into account climate change considerations;
- (b) applying the concept of universal access (the concept of universal access means unimpeded access for people of all ages and abilities in different situations and under various circumstances; and
- (c) considering the incremental risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events.

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

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

16.2 The Contractor shall not carry out mobilization to the Site unless the Project Manager gives approval, an approval that shall not be unreasonably delayed, to the measures the Contractor proposes to address environmental and social risks and impacts, which at a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel submitted as part of the Bid and agreed as part of the Contract.

The Contractor shall submit, to the Project Manager for its approval any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works. These MSIPs collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The Contractor shall review the C-ESMP, periodically (but not less than every six (6) months), and update it as required to ensure that it contains

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measures appropriate to the Works. The updated C-ESMP shall be submitted to the Project Manager for its approval.

**17. Approval by the Project Manager**

- 17.1 The Contractor shall submit Specification and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 17.2 The Contractor shall be responsible for design of Temporary Works.
- 17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

**18. Health, Safety and Protection of the Environment**

- 18.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 18.2 The Contractor shall:
- (a) comply with all applicable health and safety regulations and Laws;
  - (b) comply with all applicable health and safety obligations specified in the Contract;
  - (c) take care for the health and safety of all persons entitled to be on the Site and other places, if any, where the Works are being executed;
  - (d) keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons;
  - (e) provide fencing, lighting, safe access, guarding and watching of the Works until the issue of the Contract Certificate of Completion;
  - (f) 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;
  - (g) provide health and safety training of Contractor's Personnel as appropriate and maintain training records;
  - (h) actively engage the Contractor's Personnel in promoting understanding, and methods for, implementation of health and safety requirements, as well as in providing

information to Contractor's Personnel, training on occupational safety and health, and provision of personal protective equipment without expense to the Contractor's Personnel;

- (i) put in place workplace processes for Contractor's Personnel to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health;
- (j) Contractor's Personnel who remove themselves from such work situations shall not be required to return to work until necessary remedial action to correct the situation has been taken. Contractor's Personnel shall not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal;
- (k) where the Employer's Personnel, any other contractors employed by the Employer, and/or personnel of any legally constituted public authorities and private utility companies are employed in carrying out, on or near the site, of any work not included in the Contract, collaborate in applying the health and safety requirements, without prejudice to the responsibility of the relevant entities for the health and safety of their own personnel; and
- (l) establish and implement a system for regular (not less than six-monthly) review of health and safety performance and the working environment.

Subject to GCC Sub-Clause 16.2, the Contractor shall submit to the Project Manager for its approval a health and safety manual which has been specifically prepared for the Works, the Site and other places (if any) where the Contractor intends to execute the Works.

The health and safety manual shall be in addition to any other similar document required under applicable health and safety regulations and laws.

The health and safety manual shall set out all the health and safety requirements under the Contract,

- (a) which shall include at a minimum:
  - (i) the procedures to establish and maintain a safe working environment without risk to health at all workplaces, machinery, equipment and processes under the control of the Contractor, including control

measures for chemical, physical and biological substances and agents;

- (ii) details of the training to be provided, records to be kept;
- (iii) the procedures for prevention, preparedness and response activities to be implemented in the case of an emergency event (i.e. an unanticipated incident, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning);
- (iv) remedies for adverse impacts such as occupational injuries, deaths, disability and disease;
- (v) the measures to be taken to avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases,
- (vi) the measures to be implemented to avoid or minimize the spread of communicable diseases (including transfer of Sexually Transmitted Diseases or Infections (STDs), such as HIV virus) and non-communicable diseases associated with the execution of the Works, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. This includes taking measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent Contract-related labor;
- (vii) the policies and procedures on the management and quality of accommodation and welfare facilities if such accommodation and welfare facilities are provided by the Contractor in accordance with GCC Sub-Clause 9.4.6; and

(b) any other requirements stated in the Specification.

### 18.3 Protection of the environment

- (a) The Contractor shall take all necessary measures to: protect the environment (both on and off the Site); and

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- (b) limit damage and nuisance to people and property resulting from pollution, noise and other results of the Contractor's operations and/ or activities.

The Contractor shall ensure that emissions, surface discharges, effluent and any other pollutants from the Contractor's activities shall exceed neither the values indicated in the Specification, nor those prescribed by applicable laws.

In the event of damage to the environment, property and/or nuisance to people, on or off Site as a result of the Contractor's operations, the Contractor shall agree with the Project Manager the appropriate actions and time scale to remedy, as practicable, the damaged environment to its former condition. The Contractor shall implement such remedies at its cost to the satisfaction of the Project Manager.

**19. Archaeological and Geological Findings**

19.1 All fossils, coins, articles of value or antiquity, structures, groups of structures, and other remains or items of geological, archaeological, paleontological, historical, architectural or religious interest found on the Site shall be placed under the care and custody of the Employer. The Contractor shall:

- (a) take all reasonable precautions, including fencing-off the area or site of the finding, to avoid further disturbance and prevent Contractor's Personnel or other persons from removing or damaging any of these findings;
- (b) train relevant Contractor's Personnel on appropriate actions to be taken in the event of such findings; and
- (c) implement any other action consistent with the requirements of the Specification and relevant laws.

The Contractor shall, as soon as practicable after discovery of any such finding, notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

**20. Possession of the Site**

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

**21. Access to the Site**

21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager (including the Bank staff or consultants acting on the Bank's behalf, stakeholders and third parties, such as independent experts, local communities, or non-governmental organizations), including to carry out

environmental and social audit, as appropriate, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

**22. Instructions, Inspections and Audits**

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

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

22.3 Inspections & Audit by the Bank

Pursuant to paragraph 2.2 e. of Appendix A to the GCC- Fraud and Corruption, the Contractor shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the Bank. The Contractor's and its Subcontractors' and subconsultants' attention is drawn to GCC Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

**23. Appointment of the Adjudicator**

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

23.2 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC**

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at the request of either party, within 14 days of receipt of such request.

**24. Procedure for Disputes**

24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.

24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

24.3 The Adjudicator shall be paid by the hour at the **rate specified in the PCC**, together with reimbursable expenses of the types **specified in the PCC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.

24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place **specified in the PCC**.

**25. Fraud and Corruption**

25.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Appendix A to the GCC.

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

**26. Stakeholder Engagement**

26.1 The Contractor shall provide relevant contract-related information, as the Employer and/or Project Manager may reasonably request to conduct Stakeholder engagements. "Stakeholder" refers to individuals or groups who:

- (i) are affected or likely to be affected by the Contract; and
- (ii) may have an interest in the Contract.

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The Contractor may also directly participate in Stakeholder engagements, as the Employer and/or Project Manager may reasonably request.

**27. Suppliers (other than Subcontractors)**

27.1 *Forced Labor:* The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage forced labor including trafficked persons as described in GCC Sub-Clause 9.4.14. If forced labor/trafficking cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.

27.2 *Child Labor:* The Contractor shall take measures to require its suppliers (other than Subcontractors) not to employ or engage child labor as described in GCC Sub-Clause 9.4.15. If child labor cases are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.

27.3 *Serious Safety Issues:* The Contractor, including its Subcontractors, shall comply with all applicable safety obligations, including as stated in GCC Sub-Clause 18.2. The Contractor shall also take measures to require its suppliers (other than Subcontractors) to adopt procedures and mitigation measures adequate to address safety issues related to their personnel. If serious safety issues are identified, the Contractor shall take measures to require the suppliers to take appropriate steps to remedy them. Where the supplier does not remedy the situation, the Contractor shall within a reasonable period substitute the supplier with a supplier that is able to manage such risks.

27.4 *Obtaining natural resource materials in relation to supplier:* The Contractor shall obtain natural resource *materials* from suppliers that can demonstrate, through compliance with the applicable verification and/ or certification requirements, that obtaining such materials is not contributing to the risk of significant conversion or significant degradation of natural or critical habitats such as unsustainably harvested wood products, gravel or sand extraction from river beds or beaches.

If a supplier cannot continue to demonstrate that obtaining such materials is not contributing to the risk of significant conversion or significant degradation of natural or critical habitats, the Contractor shall within a reasonable period substitute the

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supplier with a supplier that is able to demonstrate that they are not significantly adversely impacting the habitats.

**28. Code of Conduct**

28.1 The Contractor shall have a Code of Conduct for the Contractor's Personnel.

The Contractor shall take all necessary measures to ensure that each Contractor's Personnel is made aware of the Code of Conduct including specific behaviors that are prohibited, and understands the consequences of engaging in such prohibited behaviors.

These measures include providing instructions and documentation that can be understood by the Contractor's Personnel and seeking to obtain that person's signature acknowledging receipt of such instructions and/or documentation, as appropriate.

The Contractor shall also ensure that the Code of Conduct is visibly displayed in multiple locations on the Site and any other place where the Works will be carried out, as well as in areas outside the Site accessible to the local community and project affected people. The posted Code of Conduct shall be provided in languages comprehensible to Contractor's Personnel, Employer's Personnel and the local community.

The Contractor's Management Strategy and Implementation Plans shall include appropriate processes for the Contractor to verify compliance with these obligations.

**29. Security of the Site**

29.1 The Contractor shall be responsible for the security of the Site, and:

- (a) for keeping unauthorized persons off the Site;
- (b) authorized persons shall be limited to the Contractor's Personnel, the Employer's Personnel, and to any other personnel identified as authorized personnel (including the Employer's other contractors on the Site), by a notice from the Employer or the Project Manager to the Contractor.

Subject to GCC Sub-Clause 16.2, the Contractor shall submit for the Project Manager's No-objection a security management plan that sets out the security arrangements for the Site.

The Contractor shall (i) conduct appropriate background checks on any personnel retained to provide security; (ii) train the security personnel adequately (or determine that they are properly trained) in the use of force (and where applicable, firearms), and appropriate conduct towards Contractor's

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Personnel, Employer's Personnel and affected communities; and (iii) require the security personnel to act within the applicable Laws and any requirements set out in the Specification.

The Contractor shall not permit any use of force by security personnel in providing security except when used for preventive and defensive purposes in proportion to the nature and extent of the threat.

In making security arrangements, the Contractor shall also comply with any additional requirements stated in the Specifications

## **B. Time Control**

### **30. Program and Progress Reports**

- 30.1 Within the time **stated in the PCC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump-sum contract, the activities in the Program shall be consistent with those in the Activity Schedule. The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.
- 30.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 30.3 The Contractor shall monitor progress of the Works and submit to the Project manager progress report and any updated Program showing the actual progress achieved and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities, at intervals no longer than the periods **stated in the PCC**. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount **stated in the PCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of lump-sum Contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.

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30.4 Unless otherwise stated in the Specification, each progress report shall include the Environmental and Social (ES) metrics set out in Appendix B.

30.5 In addition to the progress reports, the Contractor shall inform the Project Manager immediately of any allegation, incident or accident in the Site, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel or Contractor's Personnel. This includes, but is not limited to, any incident or accident causing fatality or serious injury; significant adverse effects or damage to private property; or any allegation of SEA and/or SH. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information.

The Contractor, upon becoming aware of the allegation, incident or accident, shall also immediately inform the Project Manager of any such incident or accident on the Subcontractors' or suppliers' premises relating to the Works which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer's Personnel, or Contractor's, its Subcontractors' and suppliers' personnel. The notification shall provide sufficient detail regarding such incidents or accidents. The Contractor shall provide full details of such incidents or accidents to the Project Manager within the timeframe agreed with the Project Manager.

The Contractor shall require its Subcontractors and suppliers (other than Subcontractors) to immediately notify the Contractor of any incidents or accidents referred to in this Subclause.

**31. Extension of the Intended Completion Date**

31.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.

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

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- 32. Acceleration**
- 32.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 32.2 If the Contractor's priced proposals for an acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.
- 33. Delays Ordered by the Project Manager**
- 33.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.
- 34. Management Meetings**
- 34.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 34.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.
- 35. Early Warning**
- 35.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 35.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

### **C. Quality Control**

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

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

- 37. Tests**
- 37.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.
- 38. Correction of Defects**
- 38.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is **defined in the PCC**. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 38.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.
- 39. Uncorrected Defects**
- 39.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

## **D. Cost Control**

- 40. Contract Price<sup>2</sup>**
- 40.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.
- 41. Changes in the Contract Price<sup>3</sup>**
- 41.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow

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<sup>2</sup> In lump-sum contracts, replace GCC Sub-Clause 40.1 as follows:

40.1 The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

<sup>3</sup> In lump-sum contracts, replace entire GCC Clause 41 with new GCC Sub-Clause 41.1, as follows:

41.1 The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.

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

## **42. Variations**

42.1 All Variations shall be included in updated Programs<sup>4</sup> produced by the Contractor.

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

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

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

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

42.6 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in GCC Sub-Clause 41.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.<sup>5</sup>

42.7 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance

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<sup>4</sup> In lump-sum contracts, add "and Activity Schedules" after "Programs."

<sup>5</sup> In lump-sum contracts, delete this paragraph.

of the contract. The value engineering proposal shall, at a minimum, include the following;

- (a) the proposed change(s), and a description of the difference to the existing contract requirements;
- (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle cost) the Employer may incur in implementing the value engineering proposal;
- (c) a description of any effect(s) of the change on performance/functionality; and
- (d) a description of the proposed work to be performed, a program for its execution and sufficient ES information to enable an evaluation of ES risks and impacts.

The Employer may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerates the contract completion period; or
- (b) reduces the Contract Price or the life cycle costs to the Employer; or
- (c) improves the quality, efficiency, safety or sustainability of the Facilities; or
- (d) yields any other benefits to the Employer,

without compromising the functionality of the Works.

If the value engineering proposal is approved by the Employer and results in:

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

### **43. Cash Flow Forecasts**

43.1 When the Program,<sup>6</sup> is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

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<sup>6</sup> In lump-sum contracts, add “or Activity Schedule” after “Program.”

#### **44. Payment Certificates**

- 44.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 44.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 44.3 The value of work executed shall be determined by the Project Manager.
- 44.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed.<sup>7</sup>
- 44.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 44.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 44.7 If the Contractor was, or is, failing to perform any ES obligations or work under the Contract, the value of this work or obligation, as determined by the Project Manager, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Project Manager, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following:
- (a) failure to comply with any ES obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion;
  - (b) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ES issues, or anticipated risks or impacts;
  - (c) failure to implement the C-ESMP e.g. failure to provide required training or sensitization;

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<sup>7</sup> In lump-sum contracts, replace this paragraph with the following: "The value of work executed shall comprise the value of completed activities in the Activity Schedule."

- (d) failing to have appropriate consents/permits prior to undertaking Works or related activities;
- (e) failure to submit ES report/s (as described in Appendix B), or failure to submit such reports in a timely manner;
- (f) failure to implement remediation as instructed by the Project Manager within the specified timeframe (e.g. remediation addressing non-compliance/s).

#### **45. Payments**

- 45.1 Payments shall be adjusted for deductions for advance payments And retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 45.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 45.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 45.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

#### **46. Compensation Events**

- 46.1 The following shall be Compensation Events:
- (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
  - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
  - (c) The Project Manager orders a delay or does not issue Drawings, Specification, or instructions required for execution of the Works on time.

- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.

46.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

46.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

46.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the

Contractor's not having given early warning or not having cooperated with the Project Manager.

#### **47. Tax**

47.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 49.

#### **48. Currencies**

48.1 Where payments are made in currencies other than the currency of the Employer's country **specified in the PCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

#### **49. Price Adjustment**

49.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the PCC**. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies to each Contract currency:

$$P_c = A_c + B_c \text{ Imc/Ioc}$$

where:

$P_c$  is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

$A_c$  and  $B_c$  are coefficients<sup>8</sup> **specified in the PCC**, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

$Imc$  is the index prevailing at the end of the month being invoiced and  $Ioc$  is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

49.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

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<sup>8</sup> The sum of the two coefficients  $A_c$  and  $B_c$  should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency are added to the Contract Price.

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## 50. Retention

50.1 The Employer shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.

50.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC Sub-Clause 57.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an “on demand” Bank guarantee.

## 51. Liquidated Damages

51.1 The Contractor shall pay liquidated damages to the Employer at the rate per day **stated in the PCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the PCC**. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor’s liabilities.

51.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 45.1.

## 52. Bonus

52.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the PCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

## 53. Advance Payment

53.1 The Employer shall make advance payment to the Contractor of the amounts **stated in the PCC** by the date **stated in the PCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.

53.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.

53.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

#### **54. Securities**

54.1 The Performance Security, and if so **specified in the PCC** an environmental and social (ES) performance security, shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC**, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Certificate of Completion in the case of a Performance Bond.

#### **55. Dayworks**

55.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

55.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.

55.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

#### **56. Cost of Repairs**

56.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

### **E. Finishing the Contract**

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- 57. Completion** 57.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.
- 58. Taking Over** 58.1 The Employer shall take over the Site and the Works within seven days of the Project Manager's issuing a Certificate of Completion.
- 59. Final Account** 59.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.
- 60. Operating and Maintenance Manuals** 60.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated in the PCC**.
- 60.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 60.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.
- 61. Termination** 61.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 61.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
  - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;

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- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
  - (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;
  - (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
  - (f) the Contractor does not maintain a Security, which is required;
  - (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the PCC**; or
  - (h) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Employer may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.

61.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.

61.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

61.5 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 61.2 above, the Project Manager shall decide whether the breach is fundamental or not.

## **62. Payment upon Termination**

62.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **specified in the PCC**. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the

Contractor, the difference shall be a debt payable to the Employer.

62.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

**63. Property**

63.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer if the Contract is terminated because of the Contractor's default.

**64. Release from Performance**

64.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

**65. Suspension of Bank Loan or Credit**

65.1 In the event that the Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:

- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice.
- (b) If the Contractor has not received sums due to it within the 28 days for payment provided for in GCC Sub-Clause 45.1, the Contractor may immediately issue a 14-day termination notice.

# APPENDIX A TO GENERAL CONDITIONS

## Fraud and Corruption

*(Text in this Appendix shall not be modified)*

### 1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

### 2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (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, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, 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:
  - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation 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

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank 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;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;<sup>1</sup> (ii) to be a nominated<sup>2</sup> sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders(applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect<sup>3</sup> all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

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

<sup>2</sup> A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

<sup>3</sup> Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

# APPENDIX B

## Environmental and Social (ES)

### Metrics for Progress Reports

*[Note to Employer: the following metrics may be amended to reflect the specifics of the Contract. The Employer shall ensure that the metrics provided are appropriate for the Works and impacts/key issues identified in the environmental and social assessment]*

*Metrics for regular reporting:*

- a. *environmental incidents or non-compliances with contract requirements, including contamination, pollution or damage to ground or water supplies;*
- b. *health and safety incidents, accidents, injuries that require treatment and all fatalities;*
- c. *interactions with regulators: identify agency, dates, subjects, outcomes (report the negative if none);*
- d. *status of all permits and agreements:*
  - i. *work permits: number required, number received, actions taken for those not received;*
  - ii. *status of permits and consents:*
    - *list areas/facilities with permits required (quarries, asphalt & batch plants), dates of application, dates issued (actions to follow up if not issued), dates submitted to resident engineer (or equivalent), status of area (waiting for permits, working, abandoned without reclamation, decommissioning plan being implemented, etc.);*
    - *list areas with landowner agreements required (borrow and spoil areas, camp sites), dates of agreements, dates submitted to resident engineer (or equivalent);*
    - *identify major activities undertaken in each area in the reporting period and highlights of environmental and social protection (land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation);*
    - *for quarries: status of relocation and compensation (completed, or details of activities and current status in the reporting period).*

- e. *health and safety supervision:*
  - i. safety officer: number days worked, number of full inspections & partial inspections, reports to construction/project management;
  - ii. number of workers, work hours, metric of PPE use (percentage of workers with full personal protection equipment (PPE), partial, etc.), worker violations observed (by type of violation, PPE or otherwise), warnings given, repeat warnings given, follow-up actions taken (if any);
- f. *worker accommodations:*
  - i. number of expats housed in accommodations, number of locals;
  - ii. date of last inspection, and highlights of inspection including status of accommodations' compliance with national and local law and good practice, including sanitation, space, etc.;
  - iii. actions taken to recommend/require improved conditions, or to improve conditions.
- g. *Health services: provider of health services, information and/or training, location of clinic, number of non-safety disease or illness treatments and diagnoses (no names to be provided);*
- h. *gender (for expats and locals separately): number of female workers, percentage of workforce, gender issues raised and dealt with (cross-reference grievances or other sections as needed);*
- i. *training:*
  - i. number of new workers, number receiving induction training, dates of induction training;
  - ii. number and dates of toolbox talks, number of workers receiving Occupational Health and Safety (OHS), environmental and social training;
  - iii. number and dates of communicable diseases (including STDs) sensitization and/or training, no. workers receiving training (in the reporting period and in the past); same questions for gender sensitization, flag person training.
  - iv. number and date of SEA and SH prevention sensitization and/or training events, including number of workers receiving training on Code of Conduct for Contractor's Personnel (in the reporting period and in the past), etc.
- j. *environmental and social supervision:*
  - i. environmentalist: days worked, areas inspected and numbers of inspections of each (road section, work camp, accommodations, quarries, borrow areas, spoil areas, swamps, forest crossings, etc.), highlights of activities/findings (including

- violations of environmental and/or social best practices, actions taken), reports to environmental and/or social specialist/construction/site management;
- ii. sociologist: days worked, number of partial and full site inspections (by area: road section, work camp, accommodations, quarries, borrow areas, spoil areas, clinic, HIV/AIDS center, community centers, etc.), highlights of activities (including violations of environmental and/or social requirements observed, actions taken), reports to environmental and/or social specialist/construction/site management; and
  - iii. community liaison person(s): days worked (hours community center open), number of people met, highlights of activities (issues raised, etc.), reports to environmental and/or social specialist /construction/site management.
- k. *Grievances*: list new grievances (e.g. number of allegations of SEA and SH) received in the reporting period and number of unresolved past grievances by date received, complainant's age and sex, how received, to whom referred to for action, resolution and date (if completed), data resolution reported to complainant, any required follow-up (Cross-reference other sections as needed):
- i. Worker grievances;
  - ii. Community grievances
- l. *Traffic, road safety and vehicles/equipment*:
- i. traffic and road safety incidents and accidents involving project vehicles & equipment: provide date, location, damage, cause, follow-up;
  - ii. traffic and road safety incidents and accidents involving non-project vehicles or property (also reported under immediate metrics): provide date, location, damage, cause, follow-up;
  - iii. overall condition of vehicles/equipment (subjective judgment by environmentalist); non-routine repairs and maintenance needed to improve safety and/or environmental performance (to control smoke, etc.).
- m. *Environmental mitigations and issues (what has been done)*:
- i. dust: number of working bowsers, number of waterings/day, number of complaints, warnings given by environmentalist, actions taken to resolve; highlights of quarry dust control (covers, sprays, operational status); % of rock/spoil lorries with covers, actions taken for uncovered vehicles;
  - ii. erosion control: controls implemented by location, status of water crossings, environmentalist inspections and results, actions taken to resolve issues, emergency repairs needed to control erosion/sedimentation;

- iii. quarries, borrow areas, spoil areas, asphalt plants, batch plants: identify major activities undertaken in the reporting period at each, and highlights of environmental and social protection: land clearing, boundary marking, topsoil salvage, traffic management, decommissioning planning, decommissioning implementation;
- iv. blasting: number of blasts (and locations), status of implementation of blasting plan (including notices, evacuations, etc.), incidents of off-site damage or complaints (cross-reference other sections as needed);
- v. spill clean-ups, if any: material spilled, location, amount, actions taken, material disposal (report all spills that result in water or soil contamination);
- vi. waste management: types and quantities generated and managed, including amount taken offsite (and by whom) or reused/recycled/disposed on-site;
- vii. details of tree plantings and other mitigations required undertaken in the reporting period;
- viii. details of water and swamp protection mitigations required undertaken in the reporting period.

*n. compliance:*

- i. compliance status for conditions of all relevant consents/permits, for the Work, including quarries, etc.): statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance;
- ii. compliance status of C-ESMP/ESIP requirements: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
- iii. compliance status of SEA and SH prevention and response action plan: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
- iv. compliance status of Health and Safety Management Plan re: statement of compliance or listing of issues and actions taken (or to be taken) to reach compliance
- v. other unresolved issues from previous reporting periods related to environmental and social: continued violations, continued failure of equipment, continued lack of vehicle covers, spills not dealt with, continued compensation or blasting issues, etc. Cross-reference other sections as needed.

# APPENDIX C

## Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration for Subcontractors

*[The following table shall be filled in by each subcontractor proposed by the Contractor, that was not named in the Contract]*

Subcontractor's Name: *[insert full name]*

Date: *[insert day, month, year]*

Contract reference *[insert contract reference]*

Page *[insert page number]* of *[insert total number]* pages

<b>SEA and/or SH Declaration</b>
<p>We:</p> <p><input type="checkbox"/> (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.</p> <p><input type="checkbox"/> (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.</p> <p><input type="checkbox"/> (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. An arbitral award on the disqualification case has been made in our favor.</p> <p><input type="checkbox"/> (d) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have subsequently demonstrated that we have adequate capacity and commitment to comply with SEA /SH obligations.</p> <p><input type="checkbox"/> (e) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations for a period of two years. We have attached specific evidence demonstrating that we have adequate capacity and commitment to comply with SEA and SH obligations.</p>
<p><b><i>[If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]</i></b></p>
<p><b><i>[If (d) or ( e) above are applicable, provide the following information:]</i></b></p>
<p>Period of disqualification: From: _____ To: _____</p>
<p>If previously provided on another Bank financed works contract, details of evidence that demonstrated adequate capacity and commitment to comply with SEA/SH obligations <b>(as per (d) above)</b></p> <p>Name of Employer: _____</p> <p>Name of Project: _____</p> <p>Contract description: _____</p> <p>Brief summary of evidence provided: _____</p>

_____ Contact Information: (Tel, email, name of contact person): _____ _____
As an alternative to the evidence under (d), other evidence demonstrating adequate capacity and commitment to comply with SEA/SH obligations ( <b>as per (e) above</b> ) [ <i>attach details as appropriate</i> ]. _____ _____ _____

Name of the Subcontractor \_\_\_\_\_

Name of the person duly authorized to sign on behalf of the Subcontractor \_\_\_\_\_

Title of the person signing on behalf of the Subcontractor \_\_\_\_\_

Signature of the person named above \_\_\_\_\_

Date signed \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_

## Section IX - Particular Conditions of Contract

<b>A. General</b>	
<b>GCC 1.1 (d)</b>	The financing institution is: WORLD BANK
<b>GCC 1.1 (r)</b>	The Employer is  <b>Chief Officer</b> <b>Department of Agriculture</b> <b>Embu County Government</b> <b>P.O. Box 36-60100</b> <b>Embu</b> <b>Email: <a href="mailto:navcdpembucounty@gmail.com">navcdpembucounty@gmail.com</a></b>
<b>GCC 1.1 (v)</b>	The Intended Completion Date for the whole of the Works shall be <b>180 days after commencement of work (30<sup>th</sup> October, 2026)</b>
<b>GCC 1.1 (y)</b>	The Project Manager /Resident Engineer <i>Department of Agriculture</i> <i>Embu County Government</i> <i>P.O. Box 36-60100</i> <i>Embu</i> <i>Email: <a href="mailto:navcdpembucounty@gmail.com">navcdpembucounty@gmail.com</a></i>
<b>GCC 1.1 (aa)</b>	The Site is located at <b><i>Kagaari South Ward, Runyenjes Constituency, Embu County</i></b>
<b>GCC 1.1 (dd)</b>	The Start Date shall be as instructed by the Project Manager
<b>GCC 1.1 (hh)</b>	The Works consist of <ol style="list-style-type: none"> <li>1. Sub-structures</li> <li>2. Super structure</li> <li>3. Roofing works</li> <li>4. Platforms</li> <li>5. Electrical works</li> <li>6. Waste and Storm water drainages</li> <li>7. Solid waste management</li> </ol>
<b>GCC 2.2</b>	Sectional Completions are: <b><i>Not Applicable</i></b>
<b>GCC 2.3(i)</b>	The following documents also form part of the Contract: <ul style="list-style-type: none"> <li>• Letter of Intent to enter into a contract &amp; acceptance letter.</li> <li>• The Bid</li> <li>• All Addenda if any</li> <li>• The particular conditions</li> </ul>

	<ul style="list-style-type: none"> <li>• The general conditions</li> <li>• The specification</li> <li>• The drawings</li> <li>• The completed schedule</li> </ul>
<b>GCC 3.1</b>	<p>The language of the contract is <b>English</b></p> <p>The law that applies to the Contract is the law of <b>Kenya</b></p>
<b>GCC 5.1</b>	The Project manager <b>may</b> delegate any of his duties and responsibilities.
<b>GCC 8.1</b>	Schedule of other contractors: <b>Not Applicable</b>
<b>GCC 13.1</b>	<p>The minimum insurance amounts and deductibles shall be:</p> <p>(a) for loss or damage to the Works, Plant and Materials: 100% of contract sum</p> <p>(b) For loss or damage to Equipment: 100% of contract amount for Equipment</p> <p>(c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract <b>KES 50,000</b></p> <p>(d) for personal injury or death:</p> <p style="padding-left: 40px;">(i) of the Contractor's employees: <b>KES 250,000</b></p> <p style="padding-left: 80px;">(ii) of other people: <b>KES150,000</b></p>
<b>C 14.1</b>	Site Data are: <b>LAND PARCEL NO. KAGAARI/WERU/15554, KAGAARI SOUTH WARD, RUNYENJES SUB-COUNTY, EMBU COUNTY (LAT – 0.47480, LONG 37.55274), Along Embu-Meru highway at ENA market.</b>
<b>GCC 20.1</b>	The Site Possession Date(s) shall be: <b>30<sup>th</sup>April, 2026 at ENA market</b>
<b>GCC 23.1 &amp; GCC 23.2</b>	Appointing Authority for the Adjudicator: <b>Chartered Institute of Arbitrators (CIArb)</b>
<b>GCC 24.3</b>	Hourly rate (Ksh 20,000) and types of reimbursable expenses to be paid to the Adjudicator: <b>as per Chartered Institute of Arbitrators (CIArb)</b>
<b>GCC 24.4</b>	<p>Institution whose arbitration procedures shall be used:</p> <p><b>Chartered Institute of Arbitrators (CIArb)</b></p> <p><i>The place of arbitration shall be Nairobi Kenya</i></p>

<b>B. Time Control</b>	
<b>GCC 30.1</b>	The Contractor shall submit for approval a Program for the Works within <b><i>Fourteen (14)</i></b> days from the date of the Letter of Acceptance.
<b>GCC 30.3</b>	<p>The period between Program updates is <b><i>Twenty-eight (28)</i></b> days.</p> <p>The amount to be withheld for late submission of an updated Program is: <b>5% of the amount due in the next certificate.</b></p> <p>The period for submission of progress reports is <b>28</b> days.</p>
<b>C. Quality Control</b>	
<b>GCC 38.1</b>	The Defects Liability Period is: <b><i>91</i></b> days.
<b>D. Cost Control</b>	
<b>GCC 42.7</b>	If the value engineering proposal is approved by the Employer the amount to be paid to the Contractor shall be <b>Not Applicable</b> of the reduction in the Contract Price.
<b>GCC 48.1</b>	The currency of the Employer's Country is: <b><i>Kenya Shillings</i></b>

<p><b>GCC 49.1</b></p>	<p>The Contract <b>is not</b> subject to price adjustment in accordance with GCC Clause 45, and the following information regarding coefficients does <b>not</b> apply.</p> <p>The coefficients for adjustment of prices are:</p> <p>(a) For currency <b>Not Applicable</b> (i)<b>Not Applicable</b> percent non ajustable élément (coefficient A).</p> <p>(ii) <b>Not Applicable</b> percent ajustable élément (coefficient B).</p> <p>(b) For currency <b>Not Applicable</b></p> <p>(i) <b>Not Applicable</b> percent non ajustable element (coefficient A).</p> <p>(ii) <b>Not Applicable</b> percent ajustable element (coefficient B).</p> <p>The Index I for local currency shall be <b>Not Applicable</b></p> <p>The Index I for the specified international currency shall be <i>[insert index]</i>.</p> <p>The Index I for currencies other than the local currency and the specified international currency shall be <b>Not Applicable</b></p>
<p><b>GCC 50.1</b></p>	<p>The proportion of payments retained is: <b>Ten Percent 10%</b></p>
<p><b>GCC 51.1</b></p>	<p>The liquidated damages for the whole of the Works are <b>0.166%</b> per day. The maximum number of liquidated damages for the whole of the Works is <b>10%</b> of the final Contract Price.</p>

<b>GCC 52.1</b>	The Bonus for the whole of the Works is <i>NOT APPLICABLE</i> per day. The maximum amount of Bonus for the whole of the Works is <i>NOT APPLICABLE</i> of the final Contract Price.
<b>GCC 53.1</b>	The Advance Payments shall be: <b>Ten percent (10%) of the accepted contract amount</b> and shall be paid to the Contractor no later than <b>28 days</b>
<b>GCC 54.1</b>	The Performance Security amount is <b>10%</b> of the contract sum in the form of (a) Bank Guarantee:  <i>A bank guarantee shall be unconditional (on demand) (see section X, contract Forms)</i>
<b>E. Finishing the Contract</b>	
<b>GCC 60.1</b>	The date by which operating and maintenance manuals are required is <b>within 7 days of the Project Manager's issuing a Certificate of Completion.</b>  The date by which "as built" drawings are required is <b>within 7 days of the Project Manager's issuing a Certificate of Completion.</b>
<b>GCC 60.2</b>	The amount to be withheld for failing to produce "as built" drawings by the date required in GCC Sub-Clause 60.1 is <b>5% of the contract amount</b>
<b>GCC 61.2 (g)</b>	The maximum number of days is: <b><i>thirty (30) days</i></b>

<b>GCC 62.1</b>	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is <b>115% of the value of the work not completed</b>
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# Section X - Contract Forms

## Table of Forms

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## Notification of Intention to Award

**[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid.]**

**[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]**

For the attention of Bidder's Authorized Representative

Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[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 Bidders. The Notification must be sent to all Bidders 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/fax]* on *[date]* (local time)

## Notification of Intention to Award

**Employer:** *[insert the name of the Employer]*

**Project:** *[insert name of project]*

**Contract title:** *[insert the name of the contract]*

**Country:** *[insert country where RFB is issued]*

**Loan No. /Credit No. / Grant No.:** *[insert reference number for loan/credit/grant]*

**RFB No:** *[insert RFB reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

### 1. The successful Bidder

<b>Name:</b>	<i>[insert name of successful Bidder]</i>
<b>Address:</b>	<i>[insert address of the successful Bidder]</i>
<b>Contract price:</b>	<i>[insert contract price of the successful Bid]</i>

**2. Other Bidders** *[INSTRUCTIONS: insert names of all Bidders that submitted a Bid. If the Bid's price was evaluated include the evaluated price as well as the Bid price as read out.]*

Name of Bidder	Bid price	Evaluated Bid price (if applicable)
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]

**3. Reason/s why your Bid was unsuccessful**

*[INSTRUCTIONS: State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]*

**4. 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 Bid. 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 Bidder, contact details; and address the request for debriefing as follows:

**Attention:** [insert full name of person, if applicable]

**Title/position:** [insert title/position]

**Agency:** [insert name of Employer]

**Email address:** [insert email address]

**Fax number:** [insert fax number] *delete if not used*

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.

## 5. 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 Bidder, contact details; and address the Procurement-related Complaint as follows:

**Attention:** [insert full name of person, if applicable]

**Title/position:** [insert title/position]

**Agency:** [insert name of Employer]

**Email address:** [insert email address]

**Fax number:** [insert fax number] *delete if not used*

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.

### Further information:

For more information see the [Procurement Regulations for IPF Borrowers \(Procurement Regulations\)\[https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=4005\]](https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=4005) (Annex III). You should read these provisions before preparing and submitting your complaint. In addition, the World Bank's Guidance "[How to make a Procurement-related Complaint](http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework)" [<http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework>] provides a useful explanation of the process, as well as a sample letter of complaint.

In summary, there are four essential requirements:

1. You must be an 'interested party'. In this case, that means a Bidder who submitted a Bid in this bidding process, and is the recipient of a Notification of Intention to Award.
2. The complaint can only challenge the decision to award the contract.
3. You must submit the complaint within the period stated above.

4. You must include, in your complaint, all of the information required by the Procurement Regulations (as described in Annex III).

**6. Standstill Period**

**DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).**

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

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 Employer:

**Signature:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title/position:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

## Beneficial Ownership Disclosure Form

**INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM**

*This Beneficial Ownership Disclosure Form (“Form”) is to be completed by the successful Bidder<sup>1</sup>. In case of joint venture, the Bidder 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 Bidder is any natural person who ultimately owns or controls the Bidder by 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 Bidder*

**RFB No.:** *[insert number of RFB process]*

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

**To:** *[insert complete name of Employer]*

In response to your request in the Letter of Acceptance dated *[insert date of letter of Acceptance]* to furnish additional information on beneficial ownership: *[select one option as applicable and delete the options that are not applicable]*

(i) we hereby 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 Bidder  (Yes / No)
<i>[include full name (last, middle, first),</i>			

<i>nationality, country of residence]</i>			
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**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 Bidder

**OR**

(iii) *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 Bidder 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 Bidder]”

**Name of the Bidder:** *\*[insert complete name of the Bidder]*\_\_\_\_\_

**Name of the person duly authorized to sign the Bid on behalf of the Bidder:** *\*\*[insert complete name of person duly authorized to sign the Bid]*\_\_\_\_\_

**Title of the person signing the Bid:** *[insert complete title of the person signing the Bid]*\_\_\_\_\_

**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]*\_\_\_\_\_

\* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to “Bidder” in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

\*\* Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

# Letter of Acceptance

[on letterhead paper of the Employer]

..... [date]. .....

To: ..... [ name and address of the Contractor] .....

Subject: ..... [Notification of Award Contract No]. .....

This is to notify you that your Bid dated . . . . [insert date] . . . . for execution of the . . . . .  
. . . . [insert name of the contract and identification number, as given in the PCC].....for the  
Accepted Contract Amount of . . . . . [insert amount in numbers and words and name of  
currency], as corrected and modified in accordance with the Instructions to Bidders is  
hereby accepted by our Agency.

You are requested to furnish (i) the Performance Security and an Environmental and Social (ES) Performance Security [**Delete ES Performance Security if it is not required under the contract**] within 28 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form and the ES Performance Security Form, [**Delete reference to the ES Performance Security Form if it is not required under the contract**] and (ii) the additional information on beneficial ownership in accordance with BDS ITB 47.1, within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in Section X - Contract Forms, of the bidding document.  
**[Choose one of the following statements:]**

We accept that \_\_\_\_\_ [insert the name of Adjudicator proposed by the Bidder] be appointed as the Adjudicator.

[or]

We do not accept that \_\_\_\_\_ [insert the name of the Adjudicator proposed by the Bidder] be appointed as the Adjudicator, and by sending a copy of this Letter of Acceptance to \_\_\_\_\_ [insert name of the Appointing Authority], the Appointing Authority, we are hereby requesting such Authority to appoint the Adjudicator in accordance with ITB 48.1 and GCC Sub-Clause 23.1.

Authorized Signature: .....

Name and Title of Signatory: .....

Name of Agency: .....

**Attachment: Contract Agreement**

# Contract Agreement

THIS AGREEMENT made the . . . . .day of . . . . ., . . . . ., between . . . . .  
. [name of the Employer]. . . . . (hereinafter “the Employer”), of the one part, and . . . . .  
[name of the Contractor]..... (hereinafter “the Contractor”), of the other part:

WHEREAS the Employer desires that the Works known as . . . . . [name of the Contract]. . . . .  
. should be executed by the Contractor, and has accepted a Bid by the Contractor for the  
execution and completion of these Works and the remedying of any defects therein,

The Employer 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 Bid
  - (c) the addenda Nos \_\_\_\_\_(if any)
  - (d) the Particular Conditions
  - (e) the General Conditions of Contract, including appendix;
  - (f) the Specification
  - (g) the Drawings
  - (h) Bill of Quantities;<sup>1</sup> and
  - (i) any other document listed in the PCC as forming part of the Contract, but not limited to;
    - i. the ES Management Strategies and Implementation Plans; and
    - ii. Code of Conduct for Contractor’s Personnel (ES).

3. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

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<sup>1</sup> In lump sum contracts, delete “Bill of Quantities” and replace with “Activity Schedule.”

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of . . . . *[name of the borrowing country]* .....on the day, month and year specified above.

Signed by: .....  
for and on behalf of the Employer

Signed by: .....  
for and on behalf the Contractor

in the  
presence of: .....  
Witness, Name, Signature, Address, Date

in the  
presence of: .....  
Witness, Name, Signature, Address, Date

# Performance Security

## Option 1: Demand Guarantee

*[Guarantor letterhead or SWIFT identifier code]*

**Beneficiary:** *[insert name and Address of Employer]*

**Date:** *[Insert date of issue]*

**PERFORMANCE GUARANTEE No.:** *[Insert guarantee reference number]*

**Guarantor:** *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that \_ *[insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of \_ *[insert name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

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 *[insert amount in figures]* (\_\_\_\_\_) *[insert amount in words]*,<sup>1</sup> 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.

This guarantee shall expire, no later than the .... Day of ....., 2...<sup>2</sup>, and any demand for payment under it must be received by us at this office indicated above on or before that date.

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<sup>1</sup> *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

<sup>2</sup> *Insert the date twenty-eight days after the expected completion date as described in GCC Sub-Clause 57.1. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer 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 Employer 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*

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

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*[signature(s)]*

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

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*[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."*

# Performance Security

## Option 2: Performance Bond

By this Bond *[insert name of Principal]* as Principal (hereinafter called “the Contractor”) and *[insert name of Surety]* as Surety (hereinafter called “the Surety”), are held and firmly bound unto *[insert name of Employer]* as Obligee (hereinafter called “the Employer”) in the amount of *[insert amount in words and figures]*, 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.

WHEREAS the Contractor has entered into a written Agreement with the Employer dated the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_, for *[name of contract and brief description of Works]* in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

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 Employer to be, in default under the Contract, the Employer having performed the Employer’s obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or Bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer 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 Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or
- (3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of issue of the Certificate of Completion.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_  
\_\_\_\_\_.

SIGNED ON \_\_\_\_\_ on 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 \_\_\_\_\_

# Environmental and Social (ES) Performance Security

## ES Demand Guarantee

*[Guarantor letterhead or SWIFT identifier code]*

**Beneficiary:** *[insert name and Address of Employer]*

**Date:** *[Insert date of issue]*

**ES PERFORMANCE GUARANTEE No.:** *[Insert guarantee reference number]*

**Guarantor:** *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that \_\_\_\_\_(hereinafter called "the Applicant") has entered into Contract No. \_\_\_\_\_ dated \_\_\_\_\_with the Beneficiary, for the execution of \_\_\_\_\_(hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

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 \_\_\_\_\_( \_\_\_\_\_),<sup>1</sup> 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 Environmental and/or Social (ES) obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the .... Day of ....., 2...<sup>2</sup>, and any demand for payment under it must be received by us at this office indicated above on or before that date.

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<sup>1</sup> *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency (cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

<sup>2</sup> *Insert the date twenty-eight days after the expected completion date as described in GCC Sub- Clause 57.1. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer 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 Employer 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."*

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

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*[signature(s)]*

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

# Advance Payment Security

## Demand Guarantee

*[Guarantor letterhead or SWIFT identifier code]*

**Beneficiary:** *[Insert name and Address of Employer]*

**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]*

We have been informed that *[insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (\_\_\_\_\_) *[insert amount in words]*<sup>1</sup> 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.

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

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<sup>1</sup> *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 Employer.*

has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant's bank]*..

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 *[insert day]* day of *[insert month]*, 2 *[insert year]*,<sup>2</sup> whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

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*[signature(s)]*

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

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<sup>2</sup> *Insert the expected completion date as described in GCC Sub- Clause 57.1. The Employer should note that in the event of an extension of the expected completion date of the Contract, the Employer 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 Employer 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."*