

### REPUBLIC OF KENYA

#### MINISTRY OF HEALTH

#### PROPOSED UPGRADINGOF KIGUMO SUB-COUNTY HOSPITAL IN MURANG'A COUNTY

TENDER NO.: MOH/ONT/DSP/11/2020-2021

W.P. ITEM NO: D108/CE/MUR/1902-JOB NO. 10671A

#### SPECIFICATIONS AND BILLS OF QUANTITIES

#### **FOR**

# SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF INCINERATOR

#### **ARCHITECT**

**Chief Architect,** 

State Department for Public Works P.O. Box 30743-00100 Nairobi

#### **QUANTITY SURVEYOR**

**Chief Quantity Surveyor,** 

State Department for Public Works P.O. Box 30743-00100 Nairobi

#### STRUCTURAL ENGINEER

Chief Engineer (Structural),

State Department for Public Works P.O. Box 30743-00100 Nairobi

#### **ELECTRICAL ENGINEER**

**Chief Engineer (Electrical)**,

State Department for Public Works, P.O. Box 41191-00100 Nairobi

#### **MECHANICAL ENGINEER**

**Chief Engineer (Mechanical-BS)** 

State Department for Public Works P.O. Box 41191-00100 Nairobi

#### CLIENT

Principal Secretary Ministry of Health P.O. Box 30016-00100 NAIROBI

December 2020

#### **SECTION I: INVITATION FOR TENDERS**

The **Ministry of Health**, invites sealed tenders from interested eligible Kenyan contractors registered in the relevant NCA Category for the following works.

Tender No.	Tender Name	Eligibility	Bid Security
MOH/ONT/DSP/11/2020- 2021	Supply, Delivery, Installation, Testing and Commissioning of Incinerator	Open National Tender	Ksh.150, 000

Interested eligible contractors may obtain complete set of tender documents from Supply Chain Management office, located at **Afya House**, **5**<sup>th</sup> **Floor**, **Room No.514** during normal working hours upon payment of non-refundable fee of **Kshs.1,000** in cash or Bankers Cheque payable to the Principal Secretary, Ministry of Health at the **Cash Office located on 2**<sup>nd</sup> **floor of Afya House**.

The documents can also be viewed and downloaded from the Ministry of Health website www.health.go.ke and from the Public Procurement Information Portal <a href="www.tenders.go.ke">www.tenders.go.ke</a> at no fee. Bidders who download the tender documents must forward their particulars immediately for records and communication of any further tender clarifications or addenda to email <a href="mailto:procurement514health@gmail.com">procurement514health@gmail.com</a>.

Prices quoted should be net inclusive of all taxes, must be in Kenya shillings and shall remain valid for **120 days** from the closing date of the tender. The Bid Security in the amount specified above must be from a reputable bank or from a Public Procurement and Regulation Authority (PPRA) accredited Insurance Company and shall be valid for One Hundred and fifty **(150) days** from the tender opening date. Completed tender documents are to been closed in plain sealed envelopes marked with tender name and tender number and deposited in the **Tender Box located at Afya House, 1**<sup>st</sup> **Floor** or be addressed to:

Principal Secretary, Ministry of Health P.O. Box 30016 – 00100 Nairobi

So as to be received on or before **Monday 18**<sup>th</sup> **January 2021 at 10.00am.** Tenders will be opened immediately after closing in the presence of the candidates or their representatives who choose to attend at *GTZ Boardroom, Afya house, Ground floor*.

Head, Supply Chain Management Unit FOR: PRINCIPAL SECRETARY

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#### **DEFINITIONS**

The following terms and expressions used in the contract document shall have the following meanings:

The Employer The Principal Secretary

Ministry of Health P.O. Box 30016-00100

**NAIROBI** 

Employer's representative This shall mean the Project Manager and shall be

The Works Secretary

State Department of Public Works

P.O. Box 30743-00100

**NAIROBI** 

Architect Chief Architect

State Department of Public Works

P.O. Box 30743-00100

**NAIROBI** 

Engineer (Mechanical) Chief Engineer - Mechanical (BS)

State Department of Public Works

P.O. Box 41191-00100

**NAIROBI** 

Quantity Surveyor Chief Quantity Surveyor

State Department of Public Works

P.O. Box 30743-00100

**NAIROBI** 

Structural Engineer Chief Engineer (Structural)

State Department of Public Works

P.O. Box 30743-00100

**NAIROBI** 

Main contractor the firm appointed to carry the supply, delivery,

Installation, testing and commissioning Incinerator.

Site Location Kigumo Sub-County Hospital

#### **SPECIAL NOTES**

- 1. These notes shall form part of the Instructions to Tenderers and Conditions of Contract.
- 2. The tenderer is required to check the number of pages in this document and should he find any missing, or in duplicate, or indistinct he should inform the Chief Mechanical Engineer (BS), State Department for Public Works.
- 3. Should the tenderer be in any doubt about the precise meaning of any item or figure, for any reason whatsoever, he must inform the Chief Mechanical Engineer (BS), State Department for Public Works, in order that the correct meaning may be decided before the date of submission of tender.
- 4. No liability will be admitted nor claim allowed, in respect of errors in the tender due to mistakes in the specification, which should have been rectified in the manner, described above.
- 5. All tenderers must make a declaration that they have not and will not make any payment to any person which can be perceived as an inducement to enable them to win this tender.
- 6. Any tenderer whose firm uses the titles "Engineer" and "Engineers" must produce evidence of registration of at least one of the directors by the Engineers Registration Board of Kenya to avoid disqualification.

#### FORM OF TENDER

To: The Principal Secretary
Ministry of Health
P.O. Box 30016-00100
NAIROBI

Dear Sir,

of:

THE SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF INCINERATOR FOR THE PROPOSED UPGRADING OF KIGUMO SUB-COUNTY HOSPITAL IN MURANG'A COUNTY In accordance with the Instructions to Tenderers, Conditions of Contract, Specifications and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum

	Kshs	[Amount in figures]
	, .	
1.	. We undertake, if our	tender is accepted, to commence the Works as
		possible after the receipt of the Employer's Representative's notice to commence, whole of the Works comprised in the Contract within the time stated in the ons of Contract.
2.	. We agree to abide by	this tender for a period of 120 days from the date of tender opening and shall us and may be accepted at any time before that date.
3.	. Unless and until a for	mal Agreement is prepared and executed this tender together with your written shall constitute a binding Contract between us.
1.	. Understand that you	are not bound to accept the lowest or any tender you may receive
	Name of the sign	natory
	Signature	in the capacity of
	Duly authorized	to sign tenders for and on behalf of:
	Of	[Address of Tenderer]
	PIN No	
	VAT CERTIFI	CATE No.
	Witness:	Name
		Address
		Signature
		[iv]

#### FORM OF TENDER SECURITY FROM BANK

		(hereinafter called
		for the SUPPLY, DELIVERY,
		NING OF INCINERATOR FOR THE PROPOSED SPITAL IN MURANG'A COUNTY KNOW ALL
	by these presents that WE	
LOILE	y of these presents that WE	
Having o	ur registered office at	
_	ter called "the Bank"), are bound unto	
(hereinaf	ter called "the Employer") in the sum of Kshs	
for which	n payment will and truly to be made to the said E	mployer, the Bank binds itself, its successors and assigns by
	sents sealed with the Common Seal of the said	
	20	
THE CO	NDITIONS of this obligation are:	
1.		ws his tender during the period of tender validity specified in
	the instructions to Tenderers	
	Or	
2.	_	acceptance of his tender by the Employer during the period of
	tender validity:	
	(a) fails an anti-contact that forms of A	greement in accordance with the Instructions to Tenderers, if
	required; or	greement in accordance with the instructions to Tenderers, if
	required, or	
	(b) fails or refuses to furnish the Performan	ace Security, in accordance with the Instructions to Tenderers;
	(b) Tails of ferases to farmon the ferrorman	nee security, in accordance with the instructions to Tenderers,
We unde	ertake to pay to the Employer up to the above a	mount upon receipt of his first written demand, without the
		that in his demand the Employer will note that the amount
		f one or both of the two conditions, specifying the occurred
	or conditions.	, ,, ,, , , , , ,
This guar	rantee will remain in force for a period of 150 day	s from the date of tender opening, and any demand in respect
thereof sl	hould reach the Bank not later than the saiddate	•
	(Date)	(Signature of the Bank)
	(Witness)	(Seal)
	(Witness)	(Seal)

#### FORM OF TENDER SECURITY FROM INSURANCE

WHERE	AS	(hereinafter
called "th	e Tenderer") has submitted his tender dated	for THE SUPPLY,
DELIVE	ERY, INSTALLATION, TESTING AND COM	MISSIONING OF INCINERATOR FOR THE
PROPOS	SED UPGRADING OF KIGUMO SUB-COU	NTY HOSPITAL IN MURANG'A COUNTY
KNOW A	ALL PEOPLE by these presents that WE	
Having ou	ur registered office at	
(Here in a	after called "the Insurance"), are bound unto	
(Here in a	after called "the Employer") in the sum of Kshs	
for which	payment well and truly to be made to the said Emplo	oyer, the Insurance binds itself, its successors and assigns
by these	e presents sealed with the Common S	eal of the said Insurance this
	Day of	
	20	
THE CO	NDITIONS of this obligation are:	
3.	If after tender opening the Tenderer withdraws h	nis tender during the period of tender validity specified in
	the instructions to Tenderers	
	Or	
4.	If the Tenderer, having been notified of the acce	ptance of his tender by the Employer during the period of
	tender validity:	
	_	ement in accordance with the Instructions to Tenderers, if
	required; or	
	(b) fails or refuses to furnish the Performance S	Security, in accordance with the Instructions to Tenderers
		nt upon receipt of his first written demand, without the
		in his demand the Employer will note that the amount
	by his is due to him, owing to the occurrence of one or conditions.	e or both of the two conditions, specifying the occurred
This guar	rantee will remain in force for a period of 150 days fr	om the date of tender opening, and any demand in respect
_	nould reach the Insurance not later than the said date	
	(Date)	(Signature of the Insurance)
	(Duic)	(Signature of the Histianice)
	(Mr.	(g . P)
	(Witness)	(Seal)

# SECTION A: INSTRUCTIONS TO TENDERERS.

#### INSTRUCTIONS TO TENDERERS

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#### INSTRUCTION TO TENDERERS

Note: The tenderer must comply with the following conditions and instructions and failure to do so is liable to result in rejection of the tender.

#### **GENERAL**

#### 1. **Definitions**

- (a) "**Tenderer**" means any person or persons partnership firm or company submitting a sum or sums in the Bills of Quantities in accordance with the Instructions to Tenderers, Conditions of Contract Parts I and II, Specifications, Drawings and Bills of Quantities for the work contemplated, acting directly or through a legally appointed representative.
- (b) "Approved tenderer" means the tenderer who is approved by the Employer.
- (c) Any noun or adjective derived from the word "tender" shall be read and construed to mean the corresponding form of the noun or adjective "bid". Any conjugation of the verb "tender" shall be read and construed to mean the corresponding form of the verb "bid."
- (d) **"Employer"** means a Central Government Ministry, Local Authority, State Corporation or any other Public Institution.

#### 2. Eligibility and Qualification Requirements

- 2.1 This invitation to tender is open to all tenderers who have been prequalified.
- 2.2 To be eligible for award of Contract, the tenderer shall provide evidence satisfactory to the Employer of their eligibility under Sub clause 2.1 above and of their capability and adequacy of resources to effectively carry out the subject Contract. To this end, the tenderer shall be required to update the following information already submitted during prequalification:-
  - (a) Details of experience and past performance of the tenderer on the works of a similar nature within the past five years and details of current work on hand and other contractual commitments.
  - (b) The qualifications and experience of key personnel proposed for administration and execution of the contract, both on and off site.
  - (c) Major items of construction plant and equipment proposed for use in carrying out the Contract. Only reliable plant in good working order and suitable for the work required of it shall be shown on this schedule. The tenderer will also indicate on this schedule when each item will be

- (d) Available on the Works. Included also should be a schedule of plant, equipment and material to be imported for the purpose of the Contract, giving details of make, type, origin and CIF value as appropriate.
- (e) Details of subcontractors to whom it is proposed to sublet any portion of the Contract and for whom authority will be requested for such subletting in accordance with clause 4 of the Conditions of Contract.
- (f) A draft Program of Works in the form of a bar chart and Schedule of Payment which shall form part of the Contract if the tender is accepted. Any change in the Program or Schedule shall be subjected to the approval of the Engineer.
- (g) Details of any current litigation or arbitration proceedings in which the Tenderer is involved as one of the parties.

#### 2.3 Joint Ventures

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

- (h) The tender, and in case of a successful tender, the Form of Agreement, shall be signed so as to be legally binding on all partners.
- (i) One of the partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
- (j) The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the Contract including payment shall be done exclusively with the partner in charge.
- (k) All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Form of Tender and the Form of Agreement (in case of a successful tender).
- (l) A copy of the agreement entered into by the joint venture partners shall be submitted with the tender.

#### 3. <u>Cost of Tendering</u>

The tenderer shall bear all costs associated with the preparation and submission of his tender and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

#### 4. <u>Site Visit</u>

- 4.1 The tenderer is advised to visit and examine the Site and its surroundings and obtain for himself on his own responsibility, all information that may be necessary for preparing the tender and entering into a contract. The costs of visiting the Site shall be the tenderer's own responsibility.
- 4.2 The tenderer and any of his personnel or agents will be granted permission by the Employer to enter upon premises and lands for the purpose of such inspection, but only upon the express condition that the tenderer, his personnel or agents, will release and indemnify the Employer from and against all liability in respect of, and will be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expenses however caused, which but for the exercise of such permission, would not have arisen.
- 4.3 The Employer shall organize a site visit at a date to be notified. A representative of the Employer will be available to meet the intending tenderers at the Site.

Tenderers must provide their own transport. The representative will not be available at any other time for site inspection visits.

Each tenderer shall complete the Certificate of Tenderer's Visit to the Site, whether he in fact visits the Site at the time of the organized site visit or by himself at some other time.

#### **TENDER DOCUMENTS**

#### 5. Tender Documents

- 5.1 The Tender documents comprise the documents listed here below and should be read together with any Addenda issued in accordance with Clause 7 of these instructions to tenderers.
  - a. Form of Invitation for Tenders
  - b. Instructions to Tenderer
  - c. Form of Tender
  - d. Appendix to Form of Tender
  - e. Form of Tender Surety
  - f. Statement of Foreign Currency Requirements
  - g. Form of Performance Security
  - h. Form of Agreement
  - i. Form of Advance payment Bank Guarantee
  - j. Schedules of Supplementary Information

- k. General Conditions of Contract Part I
- 1. Conditions of Particular Application Part II
- m. Specifications
- n. Bills of Quantities
- o. Drawings
- 5.2 The tenderer is expected to examine carefully all instructions, conditions, forms, terms, specifications and drawings in the tender documents. Failure to comply with the requirements for tender submission will be at the tenderer's own risk. Pursuant to clause 22 of Instructions to Tenderers, tenders which are not substantially responsive to the requirements of the tender documents will be rejected.
- 5.3 All recipients of the documents for the proposed Contract for the purpose of submitting a tender (whether they submit a tender or not) shall treat the details of the documents as "private and confidential".

#### 6. <u>Clarification of Tender Documents</u>

6.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing or by telex, cable or facsimile at the Employer's mailing address indicated in the Invitation to Tender. The Employer will respond in writing to any request for clarification which he receives earlier than 28 days prior to the deadline for the submission of tenders. Written copies of the Employer's response (including the query but without identifying the source of the inquiry) will be sent to all prospective tenderers who have purchased the tender documents.

#### 7. Amendment of Tender Documents

- 7.1 At any time prior to the deadline for submission of tenders the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective tenderer, modify the tender documents by issuing Addenda.
- 7.2 Any Addendum will be notified in writing or by cable, telex or facsimile to all prospective tenderers who have purchased the tender documents and will be binding upon them.
- 7.3 If during the period of tendering, any circular letters (tender notices) shall be issued to tenderers by, or on behalf of, the Employer setting forth the interpretation to be paced on a part of the tender documents or to make any change in them, such circular letters will form part of the tender documents and it will be assumed that the tenderer has taken account of them in preparing his tender. The tenderer must promptly acknowledge any circular letters h may receive

7.4 In order to allow prospective tenderers reasonable time in which to take the Addendum into account in preparing their tenders, the Employer may, at his discretion, extend the deadline for the submission of tenders.

#### **PREPARATION OF TENDERS**

#### 8. <u>Language of Tender</u>

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

#### 9. **Documents Comprising the Tender**

9.1 The tender to be prepared by the tenderer shall comprise: the Form of Tender and Appendix thereto, a Tender Surety, the Priced Bills of Quantities and Schedules, the information on eligibility and qualification, and any other materials required to be completed and submitted in accordance with the Instructions to Tenderers embodied in these tender documents. The Forms, Bills of Quantities and Schedules provided in the tender documents shall be used without exception (subject to extensions of the schedules in the same format and to the provisions of clause 13.2 regarding the alternative forms of Tender Surety].

#### 10. <u>Tender Prices</u>

- 10.1 All the insertions made by the tenderer shall be made in INK and the tenderer shall clearly form the figures. The relevant space in the Form of Tender and Bills of Quantities shall be completed accordingly without interlineations or erasures except those necessary to correct errors made by the tenderer in which case the erasures and interlineations shall be initialed by the person or persons signing the tender.
- A price or rate shall be inserted by the tenderer for every item in the Bills of Quantities whether the quantities are stated or not items against which no rate or price is entered by the tenderer will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities.

The prices and unit rates in the Bills of Quantities are to be the full [all-inclusive] value of the work described under the items, including all costs and expenses which may be necessary and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based.

All duties and 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 the submission of tenders, shall be included in the rates and prices and the total tender prices submitted by the Tenderer.

Each price or unit rate inserted in the Bills of Quantities should be a realistic estimate for completing the activity or activities described under that particular item and the tenderer is advised against inserting a price or rate against any item contrary to this instruction.

Every rate entered in the Bills of Quantities, whether or not such rate be associated with a quantity, shall form part of the Contract. The Employer shall have the right to call for any item of work contained in the Bills of Quantities, and such items of work to be paid for at the rate entered by the tenderer and it is the intention of the Employer to take full advantage of unbalanced low rates.

- 10.3 Unless otherwise specified the tenderer must enter the amounts representing 10% of the sub-total of the summary of the Bills of Quantities for Contingencies and Variation of Prices [V.O.P.] payments in the summary sheet and add them to the sub-total to arrive at the tender amount.
- 10.4 The tenderer shall furnish with his tender written confirmation from his suppliers or manufacturers of unit rates for the supply of items listed in the Conditions of Contract clause 47 where appropriate.
- 10.5 The rates and prices quoted by the tenderer are subject to adjustment during the performance of the Contract only in accordance with the provisions of the Conditions of Contract. The tenderer shall complete the schedule of basic rates and shall submit with his tender such other supporting information as required under clause 47 of the Conditions of Contract Part II.

#### 11. Currencies of Tender and Payment

- 11.1 Tenders shall be priced in Kenya Shillings and the tender sum shall be in Kenya Shillings.
- 11.2 Tenderers are required to indicate in the Statement of Foreign Currency Requirements, which forms part of the tender, the foreign currency required by them. Such currency should generally be the currency of the country of the tenderer's main office. However, if a substantial portion of the tenderer's expenditure under the Contract is expected to be in countries other than his country of origin, then he may state a corresponding portion of the contract price in the currency of those other countries. However, the foreign currency element is to be limited to two (2) different currencies and a maximum of 30% (thirty percent) of the Contract Price.

- 11.3 The rate of rates of exchange used for pricing the tender shall be selling rate or rates of the Central Bank ruling on the date thirty (30) days before the final date for the submission of tenders.
- Tenderers must enclose with their tenders, a brief justification of the foreign currency requirements stated in their tenders.

#### 12. <u>Tender Validity</u>

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

#### 13. <u>Tender Surety</u>

- 13.1 The tenderer shall furnish as part of his tender, a Tender Surety in the amount stated in the Appendix to Instructions to Tenderers.
- 13.2 The unconditional Tender Surety shall be in Kenya Shillings and be in form of a certified cheque, a bank draft, an irrevocable letter of credit or a guarantee from a reputable Bank approved by the Employer located in the Republic of Kenya.

The format of the Surety shall be in accordance with the sample form of Tender Surety included in these tender documents; other formats may be permitted subject to the prior approval of the Employer. The Tender Surety shall be valid for twenty eight (28) days beyond the tender validity period.

- 13.3 Any tender not accompanied by an acceptable Tender Surety will be rejected by the Employer as non-responsive.
- 13.4 The Tender Sureties of unsuccessful tenderers will be returned as promptly as possible as but not later than twenty eight (28) days after concluding the Contract execution and after a Performance Security has been furnished by the successful tenderer. The Tender Surety of the successful tenderer will be returned upon the tenderer executing the Contract and furnishing the required Performance Security.
- 13.5 The Tender Surety may be forfeited:
  - (a) if a tenderer withdraws his tender during the period of tender validity: or

- (b) in the case of a successful tenderer, if he fails
  - I. to sign the Agreement, or
  - II. to furnish the necessary Performance Security
- (c) if a tenderer does not accept the correction of his tender price pursuant to clause 23.

#### 14. <u>No Alternative Offers</u>

14.1 The tenderer shall submit an offer which complies fully with the requirements of the tender documents.

Only one tender may be submitted by each tenderer either by himself or as partner in a joint venture.

14.2 The tenderer shall not attach any conditions of his own to his tender. The tender price must be based on the tender documents. The tenderer is not required to present alternative construction options and he shall use without exception, the Bills of Quantities as provided, with the amendments as notified in tender notices, if any, for the calculation of his tender price.

Any tenderer who fails to comply with this clause will be disqualified.

#### 15. <u>Pre-Tender Meeting</u>

- The tenderer's designated representative is invited to attend a pre-Tender meeting, which if convened, will take place at the venue and time stated in the Invitation to Tender. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 15.2 The tenderer is requested as far as possible to submit any questions in writing or by cable, to reach the Employer not later than seven days before the meeting. It may not be practicable at the meeting to answer questions received late, but questions and responses will be transmitted in accordance with the following:
  - a) Minutes of the meeting, including the text of the questions raised and the responses given together with any responses prepared after the meeting, will be transmitted without delay to all purchasers of the tender documents. Any modification of the tender documents listed in —Clause 9 which may become necessary as a result of the pre-tender meeting shall be made by the Employer exclusively through the issue of a tender notice pursuant to Clause 7 and not through the minutes of the pre-tender meeting.
  - b) Non-attendance at the pre-tender meeting will not be cause for disqualification of a bidder.

#### 16. Format and Signing of Tenders

- 16.1 The tenderer shall prepare his tender as outlined in clause 9 above and mark appropriately one set "ORIGINAL" and the other "COPY".
- The copy of the tender and Bills of Quantities shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the tenderer. Proof of authorization shall be furnished in the form of the written power of attorney which shall accompany the tender. All pages of the tender where amendments have been made shall be initialed by the person or persons signing the tender.
- 16.3 The complete tender shall be without alterations, interlineations or erasures, except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person of persons signing the tender.

#### SUBMISSION OF TENDERS

#### 17. <u>Sealing and Marking of Tenders</u>

- 17.1 The tenderer shall seal the original and copy of the tender in separated envelopes, duly marking the envelopes as "ORIGINAL" and "COPY". The envelopes shall then be sealed in an outer envelope.
- 17.2 The inner and outer envelopes shall be addressed to the Employer at the address stated in the Appendix to Instructions to Tenderers and bear the name and identification of the Contract stated in the said Appendix with a warning not to open before the date and time for opening of tenders stated in the said Appendix.
- 17.3 The inner envelopes shall each indicated the name and address of the tenderer to enable the tender to be returned unopened in case it is declared "late", while the outer envelope shall bear no mark indicating the identity of the tenderer.
- 17.4 If the outer envelope is not sealed and marked as instructed above, the Employer will assume no responsibility for the misplacement or premature opening of the tender. A tender opened prematurely for this cause will be rejected by the Employer and returned to the tenderer.

#### 18 Deadline for Submission of Tenders

18.1 Tenders must be received by the Employer at the address specified in clause 17.2 and on the date and time specified in the Letter of Invitation, subject to the provisions of clause 7.4, 18.2 and 18.3.

Tenders delivered by hand must be placed in the "tender box" provided in the office of the Employer.

Proof of posting will not be accepted as proof of delivery and any tender delivered after the above stipulated time, from whatever cause arising will not be considered.

- 18.2 The Employer may, at his discretion, extend the deadline for the submission of tenders through the issue of an Addendum in accordance with clause 7, in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline shall thereafter be subject to the new deadline as extended.
- 18.3 Any tender received by the Employer after the prescribed deadline for submission of tender will be returned unopened to the tenderer.

#### **Modification and Withdrawal of Tenders**

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

#### TENDER OPENING AND EVALUATION

#### 20 <u>Tender Opening</u>

19

20.1 The Employer will open the tenders in the presence of the tenderers' representatives who choose to attend at the time and location indicated in the Letter of Invitation to Tender. The tenderers' representatives who are present shall sign a register evidencing their attendance.

- 20.2 Tenders for which an acceptable notice of withdrawal has been submitted, pursuant to clause 19, will not be opened. The Employer
  - will examine the tenders to determine whether they are complete, whether the requisite Tender Sureties have been furnished, whether the documents have been properly signed and whether the tenders are generally in order.
- 20.3 At the tender opening, the Employer will announce the tenderer's names, total tender price, tender price modifications and tender withdrawals, if any, the presence of the requisite Tender Surety and such other details as the Employer, at his discretion, may consider appropriate. No tender shall be rejected at the tender opening except for late tenders.
- 20.4 The Employer shall prepare minutes of the tender opening including the information disclosed to those present.
- 20.5 Tenders not opened and read out a tender opening shall not be considered further for evaluation, irrespective of the circumstances.

#### 21 <u>Process to be Confidential</u>

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

#### 22 Clarification of Tenders

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

#### 23 Determination of Responsiveness

- 23.1 Prior to the detailed evaluation of tenders, the Employer will determine whether each tender is substantially responsive to the requirements of the tender documents.
- 23.2 For the purpose of this clause, a substantially responsive tender is one which conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation and has a valid bank guarantee. A material deviation or reservation is one which affects in any substantial way the scope, quality, completion timing or administration of the Works to be undertaken by the tenderer under the Contract, or which limits in any substantial way, inconsistent with the tender documents, the Employer's rights or the tenderers obligations under the Contract and the rectification of which would affect unfairly the competitive position of other tenderers who have presented substantially responsive tenders.
- 23.3 Each price or unit rate inserted in the Bills of Quantities shall be a realistic estimate of the cost of completing the works described under the particular item including allowance for overheads, profits and the like.

Should a tender be seriously unbalanced in relation to the Employer's estimate of the works to be performed under any item or groups of items, the tender shall be deemed not responsive.

A tender determined to be not substantially responsive will be rejected by the Employer and may not subsequently be made responsive by the tenderer by correction of the non-conforming deviation or reservation.

#### 24 Correction of Errors

Tenders determined to be substantially responsive shall be checked by the Employer for any arithmetic errors in the computations and summations. Errors will be corrected by the Employer as follows:

- (a) Where there is a discrepancy between the amount in figures and the amount in words, the amount in words will govern.
- (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will prevail, unless in the opinion of the Employer, there is an obvious typographical error, in which case adjustment will be made to the entry containing that error.
- (c) The amount stated in the tender will be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the

Tenderer, shall be considered as binding upon the tenderer. If the tenderer does not accept the corrected amount, the tender may be rejected and the Tender Security may be forfeited in accordance with clause 13.

#### 25 Conversion to Single Currency

- 25.1 For compensation of tenders, the tender price shall first be broken down into the respective amounts payable in various currencies by using the selling rate or rates of the Central Bank of Kenya ruling on the date twenty-eight (28) days before the final date for the submission of tenders.
- 25.2 The Employer will convert the amounts in various currencies in which the tender is payable (excluding provisional sums but including Dayworks where priced competitively) to Kenya Shillings at the selling rates stated in clause 25.1.

#### **Evaluation and Comparison of Tenders**

26.1 The Employer will evaluate only tenders determined to be substantially responsive to the requirements of the tender documents in accordance with clause 23.

In evaluating tenders, the Employer will determine for each tender the evaluated tender price by adjusting the tender price as follows:

- 26.1.1 Making any correction for errors pursuant to clause 24.
- 26.1.2 Excluding Provisional Sums and provision, if any, for Contingencies in the Bills of Quantities, but including Day works where priced competitively.
- 26.2 The Employer reserves the right to accept any variation, deviation or alternative offer. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the tender documents or otherwise result in the accrual of unsolicited benefits to the Employer, shall not be taken into account in tender evaluation.
- 26.3 Price adjustment provisions in the Conditions of Contract applied over the period of execution of the Contract shall not be taken into account in tender evaluation.
- 26.4 If the lowest evaluated tender is seriously unbalanced or front loaded in relation to the Employer's estimate of the items of work to be performed under the Contract, the Employer may require the tenderer to produce detailed price analyses for any or all items of the Bills of Quantities, to demonstrate the relationship between those prices, proposed construction methods and

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

26.5 Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not sub-contract work valued at more than 50% of the Contract Price excluding Provisional Sums to a non-indigenous sub-contractor.

#### AWARD OF CONTRACT

#### 27 Award

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

#### 28 Notification of Award

- 28.1 Prior to the expiration of the period of tender validity prescribed by the Employer, the Employer will notify the successful tenderer by cable, telefax or telex and confirmed in writing by registered letter that his tender has been accepted. This letter (hereinafter and in all Contract documents called "Letter of Acceptance") shall name the sum(hereinafter and in all Contract documents called "the Contract Price") which the Employer will pay to the Contractor in consideration of the execution and completion of the Works as prescribed by the Contract.
- 28.2 Notification of award will constitute the formation of the Contract.
- 28.3 Upon the furnishing of a Performance Security by the successful tenderer, the unsuccessful tenderers will promptly be notified that their tenders have been unsuccessful.
- 28.4 Within twenty eight [28] days of receipt of the form of Contract Agreement from the Employer, the successful tenderer shall sign the form and return it to the Employer together with the required Performance Security.

#### 29 <u>Performance Guarantee</u>

29.1 Within twenty eight [28] days of receipt of the notification of award from the Employer, the successful tenderer shall furnish the Employer with a

Performance Security in an amount stated in the Appendix to Instructions to Tenderers.

29.2 The Performance Security to be provided by the successful tenderer shall be an unconditional Bank Guarantee issued at the tenderer's option by an established and a reputable Bank approved by the Employer and located in the Republic of Kenya and shall be divided into two

elements namely, a performance security payable in foreign currencies (based upon the exchange rates determined in accordance with clause 35.4 of the Conditions of Contract) and a performance security payable in Kenya Shillings. The value of the two securities shall be in the same proportions of foreign and local currencies as requested in the form of foreign currency requirements.

29.3 Failure of the successful tenderer to lodge the required Performance Security shall constitute a breach of Contract and sufficient grounds for the annulment of the award and forfeiture of the Tender Security and any other remedy under the Contract the Employer may award the Contract to the next ranked tenderer.

#### 30 Advance Payment

An advance payment, if approved by the Employer, shall be made under the Contract, if requested by the Contractor, in accordance with clause 33.1 of the Conditions of Contract. The Advance Payment Guarantee shall be denominated in the proportion and currencies named in the form of foreign currency requirements. For each currency, a separate guarantee shall be issued. The guarantee shall be issued by a bank located in the Republic of Kenya, or a foreign bank through a correspondent bank located in the Republic of Kenya, in either case subject to the approval of the Employer.

#### **APPENDIX TO INSTRUCTIONS TO TENDERERS**

#### <u>1. CLAUSE 2.1</u>

Change to read "This invitation Tender is open to all tenderer's as advertised

#### **2. OMIT**

Clauses 4.3, 5.1 (a), (d), (f), (h), (i), (j), 10.3, 10.4, 11.2, 11.3, 11.4,15, 25, 26.5, 30

#### **3. ADD TO CLAUSE 13.1**

Amount of tender surety will be **Ksh 150,000.00** 

#### **4. ADD TO CLAUSE 17.1**

Only original tender document shall be submitted.

#### **5. ADD TO CLAUSE 29.1**

Amount of performance security will be five per cent (5%)

#### 6. ADD TO CLAUSE 29.2

Performance security shall not be divided in two elements and shall be payable in Kenya Shillings Only.

#### **7. ADD TO CLAUSE 13.2**

Tender security to be valid for 150 after tender opening

#### 8. ADD TO CLAUSE 24

Replace the words in Clause 24(a),(b) and (c) with 'Any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid price shall be considered as a major deviation and shall lead to disqualification of the tender as non-responsive

#### 9. ADD TO CLAUSE 26.

The evaluation criteria in Appendix pages (i) – (viii) shall form part of the evaluation, together with information detailed on pages A17-A22

#### **TENDER EVALUATION CRITERIA**

#### **INTRODUCTION**

After tender opening, the tenders will be evaluated in 3 stages, namely:

- i. Preliminary evaluation,
- ii. Technical Evaluation;
- iii. Financial Evaluation;

#### **PRELIMINARY EVALUATION**

S/No	MANDATORY REQUIREMENTS(MR)
MR1	Valid Copy of certificate of incorporation/ Registration.
MR2	Valid Current Tax Compliance Certificate-Statement of tax compliance from Bidding Company,
MR3	Submission of valid CR12 form showing the list of directors /shareholding (issued within the last 6 months) or National Identity Card(s) for Sole Proprietorship / Partnership
MR4	Valid copy of NCA Registration Certificate, NCA 3 and above in:
	Medical watste disposal system installation (Incinerator)
MR5	Current annual contractors practicing license from NCA for works listed in item MR4
MR6	Fully filled and signed Confidential business questionnaire
MR7	Fully signed and stamped Statement of compliance
MR8	Submission of original tender document properly BOUND and sequentially serialised and all pages must be initialled or signed. (NB: Use of Spring or Box Files will not be allowed and will result in automatic disqualification.)
MR9	The Tender Security (Bid Bond) of Kshs. 150,000 in form of Bank Guarantee from a reputable bank or insurance company approved by Public Procurement Regulatory Authority (PPRA).
MR10	Provide proof authorization in form of Power of attorney (of Tender Signatory even if Director of the company/ partner, signed by commissioner of oaths)

The above requirements are mandatory and failure to meet any of them will lead to automatic disqualification

#### 3.0 TECHNICAL EVALUATION

This shall be done in two parts:

- 1. Technical evaluation of bidder's capacity.
- 2. Compliance with technical specifications for major items.

#### TECHNICAL EVALUATION OF BIDDER'S CAPACITY.

In order to comply with provisions of clause 2.2 of Instruction to Tenderers, the tenderers shall be required;

a) To fill the Standard Forms provided in the bid document for the purposes of providing the required information. The tenderers may also attach the required information if they so desire;

Parameters considered in this section shall be as shown below:

PARAMETER		<u>ACTION</u>
(i)	Tender Questionnaire	PASS/FAIL
(ii)	Key personnel	PASS/FAIL
(iii)	Contract Completed in the last Ten (10) years	PASS/FAIL
(iv)	Schedules of contractor's transport	PASS/FAIL
(v)	Schedules of contractor's equipment	PASS/FAIL
(vi)	Audited Financial Report for the last 3 years	PASS/FAIL
(vii)	Evidence of financial resources	PASS/FAIL
TOTA	.L	PASS/FAIL

**TABLE 1: Technical Evaluation** 

1.TENDER QUESTIONNAIRE FORM	PASS / FAIL
Completely filled Tender Questionnaire form	
2. KEY PERSONNEL (ATTACH EVIDENCE)	PASS / FAIL
At least 1No. <u>Foreman</u> with a degree/diploma in relevant engineering field with a minimum of 5 years relevant experience.	
3. CONTRACT COMPLETED IN THE LAST TEN (5) YEARS	PASS / FAIL
<ul> <li>a) At least 2No. Projects of similar nature, complexity and magnitude;</li> <li>OR</li> <li>b) At least 2No. Projects of similar nature but of lower value than the one in consideration.</li> </ul>	
4. SCHEDULES OF CONTRACTOR'S TRANSPORT (Proof or evidence of ownership/Lease must be provided)	PASS / FAIL
At least 1No. relevant means of transport (Vehicle)	
5. SCHEDULES OF CONTRACTOR'S EQUIPMENT (Proof or evidence of ownership/Lease must be provided)  A minimum set of tools/equipment as listed below:  • Piping threading machines  • Welding machines	PASS/FAIL
6. AUDITED FINANCIAL REPORT FOR LAST 3 YEARS	PASS / FAIL
Average Annual Turn-over to be equal or greater than the cost of the project.	
7. EVIDENCE OF FINANCIAL RESOURCES (cash in hand, lines of credit, over draft facility etc.)	PASS / FAIL
Bidder to have financial resources equal or greater than the projected monthly cash flow. Attach	
Bank statement	
Letter of credit from the bank	
Authority to seek reference	
OVERALL REMARK (PASS / FAIL)	

#### Note.

A FAIL in any of the criterion above shall render the bid to be technically Non-compliant and shall not be considered for further evaluation.

#### 3.2 COMPLIANCE WITH TECHNICAL SPECIFICATIONS FOR MAJORITEMS

In accordance with clause 3.13 of Instruction to Tenderers, Tenderers shall submit offers that comply with the requirements of the tendering documents, including the basic technical design as indicated in the Drawings and Specifications.

In order to comply with provisions of clause 3.13 of Instruction to Tenderers, the tenderers shall be required;

- a) On compliance with Technical Specifications, bidders shall supply equipment/items which comply with the technical specifications set out in the bid document. In this regard, the bidders will be required to submit relevant technical brochures/catalogues with the tender document, highlighting (using a mark-pen or highlighter) the Catalogue Number/model of the proposed items. Such brochures/catalogues should indicate comprehensive relevant data of the proposed equipment/items which should include but not limited to the following:
  - (i) Standards of manufacture;
  - (ii) Performance ratings/characteristics;
  - (iii) Material of manufacture;
  - (iv) Electrical power ratings; and
  - (v) All other requirements as indicated in the technical specifications of the bid.

The bid will then be analyzed, using the information in the technical brochures, to determine compliance with <u>key technical specifications</u> for the works/items as indicated in the tender document.

The tenderer shall fill in the Technical Schedule as specified in the tender document for Equipment and Items indicating the Country of Origin, Model/Make/Manufacturer and catalogue numbers of the Items/Equipments they propose to supply.

Bidders not complying with any of the <u>key technical specifications</u> shall be considered noncompliant to the technical specifications while those meeting all the key technical specifications shall be considered compliant

Compliance in this section shall be as shown below:

Description	PASS / FAIL
Compliance with Technical Specifications	
(Note:	
<ol> <li>Tender Evaluation Committee to evaluate compliance to all technical specifications as detailed in the tables contained in the Particular specs of this document</li> <li>Non-compliance to any of the specifications shall render the whole system non-compliant</li> </ol>	

Any bidder who is compliant shall be considered for further evaluation.

\*Monthly Cash Flow =Tender Sum/Contract Period

#### 4.0 FINANCIAL EVALUATION

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

The evaluation shall be in three stages

a) Determination of Arithmetic errors

- b) Comparison of Rates; and
- c) Consistency of the Rates.

#### 4.1 Determination of Arithmetic Errors

Tenders will be checked to determine if there are any arithmetic errors. Subject to section 74(2) of the Public Procurement and Asset Disposal Act 2020, any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive.

#### 4.2 Comparison of rates

Comparison of tender rates with State Department for Public Works rates will be done to indicate balance of the tender. Too much deviation may result in payment of bulk of the tender sum based on a few items and this risk non-completion of project.

The evaluation committee shall evaluate the deviation(s) and make an appropriate recommendation to the procuring entity giving necessary evidence. Such recommendations may include but not limited to:

- a) Recommend no adverse action to the tenderer after a convincing response;
- b) Employer requiring that the amount of the performance bond be raised at the expense of the successful tenderer to a level sufficient to protect the employer against potential financial losses;
- c) Recommend non-award based on the response provided and the available demonstrable evidence that the scope, quality, completion timing, administration of works to be undertaken by the tenderer, would adversely be affected or the rights of the employer or the tenderers obligations would be limited in a substantial way.

#### 4.3 Consistency of the Rates

The evaluation committee will compare the consistency of rates for similar items and note all inconsistencies of the rates for similar items. Tenders with inconsistent rates for similar items, particularly where the higher rate is used in the first elements of the works (front loading) risks non-completion of the project.

The evaluation committee shall evaluate the inconsistency (i.e) and make an appropriate recommendation to the procuring entity giving necessary evidence. Such recommendations may include but not limited to:

- a) Recommend no adverse action to the tenderer after a convincing response;
- b) Employer requiring that the amount of the performance bond be raised at the expense of the successful tenderer to a level sufficient to protect the employer against potential financial losses;
- c) Recommend non-award based on the response provided and the available demonstrable evidence that the scope, quality, completion timing, administration of works to be undertaken by the tenderer, would adversely be affected or the rights of the employer or the tenderers obligations would be limited in a substantial way.

#### **NOTE:**

- 1) The bidder with lowest evaluated price will be awarded the tender in line with Section 86 of the Public Procurement and Asset Disposal Act, 2015
- 2) The Procuring Entity may inspect the premises to seek further clarification/confirmation if necessary, to confirm authenticity /compliance of any condition of the tender /qualifications of the tenderer in line with Section 83 of the Public Procurement and Asset Disposal Act, 2015.
- 3) Demonstration on the use of Local products, Labour and other services will be an added advantage.

## **SECTION B**

I. CONDITIONS OF CONTRACT

## $\begin{array}{c} \textbf{CONDITIONS OF CONTRACT} \\ \underline{\textbf{CONTENTS}} \end{array}$

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#### CONDITIONS OF CONTRACT (MAIN WORKS)

#### 1. **Definitions**

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

- "Bills of Quantities" means the priced and completed Bill of Quantities forming part of the tender[where applicable].
- "Schedule of Rates" means the priced Schedule of Rates forming part of the tender [where applicable].
- **"The Completion Date"** means the date of completion of the Works as certified by the Employer's Representative.
- "The Contract" means the agreement entered into by the Employer and the Contractor as recorded in the Agreement Form and signed by the parties.
- "The Contractor" refers to the person or corporate body whose tender to carry out the Works has been accepted by the Employer.
- "The Contractor's Tender" is the completed tendering document submitted by the Contractor to the Employer.
- "The Contract Price" is the price stated in the Letter of Acceptance.
- "Days" are calendar days; "Months" are calendar months.
- "A Defect" is any part of the Works not completed in accordance with the Contract.
- "The Defects Liability Certificate" is the certificate issued by Employer's Representative upon correction of defects by the Contractor.
- "The Defects Liability Period" is the period named in the Appendix to Conditions of Contract and calculated from the Completion Date.
- **"Drawings"** include calculations and other information provided or approved by the Employer's Representative for the execution of the Contract.
- **"Employer"** includes Central or Local Government administration, Universities, Public Institutions and Corporations and is the party who employs the Contractor to carry out the Works.
- **"Equipment"** is the Contractor's machinery and vehicles brought temporarily to the Site for the execution of the Works.

- "Site" means the place or places where the permanent Works are to be carried out including workshops where the same is being prepared.
- "Materials" are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- **"Employer's Representative"** is the person appointed by the Employer and notified to the Contractor for the purpose of supervision of the Works.
- "Specification" means the Specification of the Works included in the Contract.
- "Start Date" is the date when the Contractor shall commence execution of the Works.
- "A Sub-contractor" is a person or corporate body who has a Contract with the Contractor to carry out a part of the Work in the Contract, which includes Work on the Site.
- "Temporary works" are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.
- "A Variation" is an instruction given by the Employer's Representative which varies the Works.
- "The Works" are what the Contract requires the Contractor to construct, install, and turnover to the Employer.

#### 2. Contract Documents

The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;

- (1) Agreement,
- (2) Letter of Acceptance,
- (3) Contractor's Tender,
- (4) Conditions of Contract,
- (5) Specifications,
- (6) Drawings,
- (7) Bills of Quantities or Schedule of Rates [whichever is applicable)

#### 3. Employer's Representative's Decisions

Except where otherwise specifically stated, the Employer's Representative will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

#### 4. Works, Language and Law of Contract

- 4.1 The Contractor shall construct and install the Works in accordance with the Contract documents. The Works may commence on the Start Date and shall be carried out in accordance with the Programme submitted by the Contractor, as updated with the approval of the Employer's Representative, and complete them by the Intended Completion Date.
- 4.2 The ruling language of the Contract shall be English language and the law governing the Contract shall be the law of the Republic of Kenya.

#### 5 Safety, Temporary works and Discoveries

- 5.1 The Contractor shall be responsible for design of temporary works and shall obtain approval of third parties to the design of the temporary works where required.
- 5.2 The Contractor shall be responsible for the safety of all activities on the Site.
- 5.3 Any thing of historical or other interest or significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Employer's Representative of such discoveries and carry out the Employer's Representative's instructions for dealing with them.

#### 6. Work Programme and Sub-contracting

- 6.1 Within seven days after Site possession date, the Contractor shall submit to the Employer's Representative for approval a programme showing the general methods, arrangements, order and timing for all the activities in the Works.
- 6.2 The Contractor may sub-contract the Works (but only to a maximum of 25 percent of the Contract Price) with the approval of the Employer's Representative. However, he shall not assign the Contract without the approval of the Employer in writing. Sub-contracting shall not alter the Contractor's obligations.

#### 7. The site

- 7.1 The Employer shall give possession of all parts of the Site to the Contractor.
- 7.2 The Contractor shall allow the Employer's Representative and any other person authorised by the Employer's Representative, 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.

#### 8 Instructions

8.1 The Contractor shall carry out all instructions of the Employer's Representative which are in accordance with the Contract

#### **9 Extension of Completion Date**

- 9.1 The Employer's Representative shall extend the Completion Date if an occurrence arises which makes it impossible for completion to be achieved by the Intended Completion Date. The Employer's Representative shall decide whether and by how much to extend the Completion Date.
- 9.2 For the purposes of this Clause, the following occurrences shall be valid for consideration; Delay by:
  - a) force majeure, or
  - b) reason of any exceptionally adverse weather conditions, or
  - c) reason of civil commotion, strike or lockout affecting any of the trades employed upon the Works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the Works, or
  - d) reason of the Employer's Representative's instructions issued under these Conditions, or
  - e) reason of the contractor not having received in due time necessary instructions, drawings, details or levels from the Employer's Representative for which he specifically applied in writing on a date which having regard to the date for Completion stated in the appendix to these Conditions or to any extension of time then fixed under this Clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, or
  - f) delay on the part of artists, tradesmen or others engaged by the Employer in executing work not forming part of this Contract, or
  - g) reason of delay by statutory or other services providers or similar bodies engaged directly by the Employer, or
  - h) reason of opening up for inspection of any Work covered up or of the testing or any of the Work, materials or goods in accordance with these conditions unless the inspection or test showed that the Work, materials or goods were not in accordance with this Contract, or
  - i) reason of delay in appointing a replacement Employer's Representative, or reason of delay caused by the late supply of goods or materials or in executing Work for which the Employer or his agents are contractually obliged to supply or to execute as the case may be, or
    - k) delay in receiving possession of or access to the Site.

#### 10 Management Meetings

10.1 A Contract management meeting shall be held regularly and attended by the Employer's Representative and the Contractor. Its business shall be to review the plans for the remaining Work. The Employer's Representative shall record the business of management meetings and provide copies of the record to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the Employer's Representative either at the management meeting or after the management meeting and stated in writing to all who attend the meeting.

10.2 Communication between parties shall be effective only when in writing.

#### 11 Defects

- 11.1 The Employer's Representative shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor's responsibilities. The Employer's Representative may instruct the Contractor to search for a defect and to uncover and test any Work that the Employer's Representative considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor. However, if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.
- 11.2 The Employer's Representative shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract.
- 11.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Employer's Representative's notice. If the Contractor has not corrected a defect within the time specified in the Employer's Representative's notice, the Employer's Representative will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

#### 12 Bills of Quantities/Schedule of Rates

12.1 The Bills of Quantities/Schedule of Rates shall contain items for the construction, installation, testing and commissioning of the Work to be done by the Contractor. The Contractor will be paid for the quantity of the Work done at the rates in the Bills of Quantities/Schedule of Rates for each item. Items against which no rate is entered by the Tenderer will not be paid for when executed and shall be deemed covered by the rates for other items in the Bills of Quantities/Schedule of Rates.

12.2 Where Bills of Quantities do not form part of the Contract, the Contract Price shall be a lump sum (which shall be deemed to have been based on the rates in the Schedule of Rates forming part of the tender) and shall be subject to re-measurement after each stage.

#### 13 Variations

- 13.1 The Contractor shall provide the Employer's Representative with a quotation for carrying out the variations when requested to do so. The Employer's Representative shall assess the quotation and shall obtain the necessary authority from the Employer before the variation is ordered.
- 13.2 If the Work in the variation corresponds with an item description in the Bill of Quantities/Schedule of Rates, the rate in the Bill of Quantities/Schedule of Rates shall be used to calculate the value of the variation. If the nature of the Work in the variation does not correspond with items in the Bill of Quantities/Schedule of Rates, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.
- 13.3 If the Contractor's quotation is unreasonable, the Employer's Representative may order the variation and make a change to the Contract Price, which shall be based on the Employer's Representative's own forecast of the effects of the variation on the Contractor's costs.

#### 14 Payment Certificates and Final Account

14.1 The Contractor shall be paid after each of the following stages of Work listed here below (subject to re-measurement by the Employer's Representative of the Work done in each stage before payment is made). In case of lump-sum Contracts, the valuation for each stage shall be based on the quantities so obtained in the re-measurement and the rates in the Schedule of

Rates.

(i) Advance payment **NIL** (percent of Contract Price, [after Contract execution] to be inserted by the Employer).

(ii) First stage(define stage) AS PER PROGRESS

(iii) Second stage (define stage) AS PER PROGRESS

(iv) Third stage (define stage) AS PER PROGRESS

- (v) After defects liability period.
- 14.2 Upon deciding that Works included in a particular stage are complete, the Contractor shall submit to the Employer's Representative his application for payment. The Employer's Representative shall check, adjust if necessary and certify the amount to be paid to the Contractor within 21 days of receipt of the Contractor's application. The Employer shall pay the Contractor the amounts so certified within 30 days of the date of issue of each Interim Certificate

- 14.3 The Contractor shall supply the Employer's Representative with a detailed final account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer's Representative shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer's Representative shall issue within 21 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 Employer's Representative shall decide on the amount payable to the Contractor and issue a Final Payment Certificate. The Employer shall pay the Contractor the amount so certified within 60 days of the issue of the Final Payment Certificate.
- 14.4 If the period laid down for payment to the Contractor upon each of the Employer's Representative's Certificate by the Employer has been exceeded, the Contractor shall be entitled to claim simple interest calculated pro-rata on the basis of the number of days delayed at the Central Bank of Kenya's average base lending rate prevailing on the first day the payment becomes overdue. The Contractor will be required to notify the Employer within 15 days of receipt of delayed payments of his intentions to claim interest.

#### 15 Insurance

15.1 The Contractor shall be responsible for and shall take out appropriate cover against, among other risks, personal injury; loss of or damage to the Works, materials and plant; and loss of or damage to property.

#### 16 Liquidated Damages

- 16.1 The Contractor shall pay liquidated damages to the Employer at the rate 0.001 per cent of the Contract price per day for each day that the actual Completion Date is later than the Intended Completion Date except in the case of any of the occurrences listed under Clause
  - 9.2. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

#### 17 Completion and Taking Over

17.1 Upon deciding that the Work is complete the Contractor shall request the Employer's Representative to issue a Certificate of Completion of the Works, upon deciding that the Work is completed.

The Employer shall take over the Site and the Works within seven days of the Employer's Representative issuing a Certificate of Completion.

#### 18 Termination

- 18.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following;
  - a) the Contractor stops Work for 30 days continuously without reasonable cause or authority from the Employer's Representative;
  - b) the Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
  - c) a payment certified by the Employer's Representative is not paid by the Employer to the Contractor within 30 days after the expiry of the payment periods stated in Sub-Clauses 14.2 and 14.3 here above.
  - d) the Employer's Representative 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.
- 18.2 If the Contract is terminated, the Contractor shall stop Work immediately, and leave the Site as soon as reasonably possible. The Employer's Representative shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

#### 19 Payment Upon Termination

- 19.1 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on Site, plant, equipment and temporary works.
- The Contractor shall, during the execution or after the completion of the Works under this Clause, remove from the Site as and when required within such reasonable time as the Employer's Representative may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to him, and in default thereof, the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.
- 19.3 Until after completion of the Works under this Clause, the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts therefore the Employer's Representative shall certify the amount of expenses properly incurred by the Employer and, if such

amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract, the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

#### 20 Corrupt Gifts and Payments of Commission

- 20.1 The Contractor shall not:
  - a) Offer or give or agree to give to any person in the service of the Employer any gifts or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract with the Employer or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract with the Employer.
  - b) Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the Laws of Kenya.

#### 21 Settlement of Disputes

21.1 Any dispute arising out of the Contract which cannot be amicably settled between the parties shall be referred by either party to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the chairman of the Chartered Institute of Arbitrators, Kenya branch, on the request of the applying party.

#### APPENDIX TO CONDITIONS OF CONTRACT

#### THE EMPLOYER IS

Name: The Principal Secretary

Ministry of Health P.O.Box 30016-00100

NAIROBI

Name of Employer's Representative: The Principal Secretary, Ministry of Health, P.O. Box

30016-00100, NAIROBI

The name of the Contract is THE SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF INCINERATOR FOR THE PROPOSED UPGRADING OF KIGUMO SUBCOUNTY HOSPITAL IN MURANG'A COUNTY

The Works consist of Supply, Delivery, Installation, Testing and Commissioning of an Incinerator and associated Works.

The Start date shall be as as in agreement with the Employer's Representative/ Project Manager.

The Intended contract period for the whole of the Works shall be as in agreement with the Employer's Representative/ Project Manager.

The following documents also form part of the Contract: Only as listed in Clause 2) i.e

- (a) **Agreement** The latest agreement and conditions of subcontract for building works by the **Kenya Association of Building and Civil Engineering Contractors (KABCEC)** signed between the main contractor and the subcontractor.
- (b) **Letter of acceptance** letter addressed to the main contractor by the project manager instructing the main contractor to enter into the sub contractor agreement with the nominated subcontractor.
- (c) **Contractors tender** the completed tendering document submitted by the subcontractor to the employer.
- (d) Conditions of contract refers to the conditions of contract in the main works and conditions of subcontract as described in the subcontract agreement (KABCEC).
- (e) **Specifications** specifications of subcontract works as described in the document.
- (f) **Bills of Quantities or schedule of Rates** (Whichever is applicable) as described in this document.
  - (g) **Drawings -** include calculations and other information provided or approved by the Employer's Representative for the execution of the Contract.

The Site Possession Date shall be as stated in the **Letter of Acceptance**.

Amount of Tender Security is **Kshs. 150,000.00** (Eighty Thousand only).

#### Clause 7

The Site is located in Kigumo Sub County Hospital

#### Clause 1 & 11

The Defects Liability Period is 6 Months

The name and Address of the Employer's representative for the purposes of submission of tenders is **The Principal Secretary, Ministry of Health, P.O. Box 30016-00100, NAIROBI** 

The tender opening date and time is as stated in the invitation to tender.

The amount of performance security is **5% percent** of the Contract Price.

Clause 16

Liquidated and Ascertained damages: At the rate of Kshs.5, 000.00 per week

Or part thereof

Contractor desires to tender

Clause 14.1

Period of interim certificate: Monthly

Clause 14.2

Period of honoring certificate: 45 days

Claus e 26.1 (M ain Contractor 's Conditions)

Percentage of certified value retained: 10%

Claus e 32.1 (M ain Contractor 's Conditions)

Limit of retention fund: 5%

Note: Clauses 26.1 and 32.1 mentioned above are in the Main Contractor's Document.

## **SECTION B**

II.SUB-CONTRACT AGREEMENT (KABCEC)

# AGREEMENT AND CONDITIONS OF SUB-CONTRACT FOR BUILDING WORKS



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# **ORIGINAL** embossed stamp

# **COUNTERPART** embossed stamp

### 1.0 AGREEMENT

1.1 This agreem	ent is made on
between	
of (or whose	e registered office is situated at)
	(hereinafter
called "the Contractor"	of the one part and
	of (or whole
registered office is situa	ted at)
	(hereinafter called "the Sub-Contractor") of the other part:
1.2 the "the main	SUPPLEMENTAL to an agreement (hereinafter referred to as a contract")
	made on
	Between
	(hereinafter called "the Employer") of the one part and the Contractor of the other part based on the Agreement and Conditions of Contract for Building Works, published by the Joint Building Council, Kenya edition.
1.3	WHEREAS the contractor is desirous of sub-letting to the Sub-Contractor

	hereinafter called "the sub-contractor works" at
	on Land Reference Nobeing part of the main contract works.
1.4	And whereas the Su-Contractor has supplied the Contractor with a priced copy of the bills of quantities (hereinafter referred to as "the sub-contractor bills"), where applicable, which together with the drawings numbered.
	(hereinafter referred to as "the sub-contract drawings), the specifications and the conditions of sub-contract have been signed by or on behalf of the parties thereto.
	And whereas the Sub-Contractor has had reasonable opportunity of inspecting the main contract or a copy thereof except the detailed prices of the Contractor included in the bills of quantities or schedule of rates.
1.5 Sub-Contract	And whereas the Architect, with the approval of the Employer, has nominated the tor to carry out the works described at clause 1.3 herein:
	NOW IT IS HEREBY AGREED AS FOLLOWS:
	For the consideration herein stated, the Sub-Contractor shall upon and subject to the inexed hereto carry out and complete the sub-contract works shown upon the sub-vings and described by or referred to in the sub-contract bills, specifications and in itions.
1.7	The Contractor shall pay the Sub-Contractor the sum of the Kshs (in words)
	) (hereinafter referred to as "the sub-contractor price") or such sum as shall become payable hereinafter at the times and in manner specified in the said conditions.
1.8 to the person	The term 'Architect', 'Quantity Surveyor' and 'Engineer', where applicable, shall refer appointed by the Employer to

1.9 applicable, re	administer the sub-contract in accordance with the main contract agreement. Where ference to the Architect shall be deemed to include reference to the Engineer.	
such appointr	In the event of the need to appoint a replacement Architect, Quantity Surveyor, ther specialist (whether named in this agreement or not) the Employer shall make nent as soon as practicable after the need for such appointment arises and shall the appointment to the Sub-Contractor through the Contract.	
	Where the sub-contract does not incorporate bills of quantities, the term "sub- 'and "bills of quantities" wherever appearing shall be deemed deleted and replaced "schedule of rates" as applicable.	
1.12 this sub-contr	The terms defined in clause 1.0 of the main contract shall have the same meaning in ract as that assigned to them therein.	
1.13	AS WITNESS the hands of the said parties;	
Signed by the said		
	(Contractor)	
	In the presence of	
	Name	
	Address	
	Signed by the said	
	(Sub-Contractor)	
	In the presence of	
	Name	
	Address	

#### CONDITIONS OF SUB-CONTRACT

#### 2.0 GENERAL OBLIGATIONS OF THE CONTRACTOR

#### The Contractor shall:

- 2.1 Timeously obtain from the Architect on behalf of the Sub-Contractor all drawings, necessary details, instructions and other information required by the Sub-Contractor for the proper carrying out of the sub-contract works.
- 2.2 Provide all such facilities and attend upon the Sub-Contractor as required and as provided in the specifications, bills of quantities and these conditions to the extent compatible with the provisions of the main contract
- 2.3Observe, perform and comply with all the provisions of the main contract and of this sub-contract on the part of the Contractor to be observed, performed and complied with to ensure satisfactory completion of the sub-contract works.

#### 3. GENERAL OBLIGATIONS OF THE SUB-CONTRACTOR

- 3.1 The Sub-Contractor shall be deemed to have notice of all the provisions of the main contract except the detailed prices of the Contractor included in the bills of quantities or in the schedule of rates.
- 3.2 The Sub-Contractor shall carry out and complete the sub-contract works in accordance with this sub-contract and in all respects to the reasonable satisfaction of the Contractor and of the Architect and in conformity with all reasonable directions and requirements of the Contractor regulating the due carrying out of the contract works.
- 3.3 The Sub-Contractor shall observe, perform and comply with all the provisions of the main contact on the part of the Sub-Contractor to be observed, performed and complied with so far as they relate and apply to the sub-contract works or any portion thereof and are not inconsistent with the expressions of this sub-contract as if all the same were set out herein.
- 3.4 Without prejudice to the generality of the foregoing requirements, the Sub- Contractor shall especially observe perform and comply with the provisions of clauses 9.0, 18.0, 19.0 22.0, 30.0, 31.0, 34.0 and 36.0 of the main contract as they apply to the sub-contract works

#### 4. SUB-CONTRACT DOCUMENTS

- 4.1 The sub-contract documents for use in the carrying out of the sub-contract works shall be:-
  - 4.1.1 The agreement and these conditions
  - 4.1.2 The sub-contract drawings as listed in the agreement
  - 4.1.3 The sub-contract bill of quantities or schedule of rates as applicable
  - 4.1.4 The specifications as separately supplied or as contained in the subcontract bills.
- 4.2 Upon the execution of the sub-contract, the Contractor shall register the agreement with the relevant statutory authority and pay all fees, charges, taxes, duties and all costs arising there from.
- 4.3 The manner of supplying contract documents, their custody, display on site and their interpretation in the event of discrepancies shall be as provided in the main contract in respect of the main contract documents with the necessary amendments made to refer to the sub-contract.

#### 5. GENERAL LIABILITY OF THE SUB-CONTRACTOR

- 5.1 The Sub-Contractor shall be liable for and shall indemnify the Contractor against and from:
  - 5.1.1 Any breach, non-observance or non-performance by the Sub-Contractor, his servants or agents of any of the said provisions of the main contract and of this sub-contract.
  - 5.1.2 Any act or omission of the Sub-Contractor, his servants or agents which involve the Contractor in any liability to the Employer under the main contract
  - 5.1.3 Any claim, damage, loss or expense due to or resulting from any negligence or breach of duty on the part of the Sub-Contractor, his servants or agents.
  - 5.1.4 Any loss or damage resulting from any claim under any statute or common law by an employee of the Sub-Contractor in respect of personal injury or death arising out of or in the course of his employment.

5.2 Provided that nothing contained in this sub-contract shall impose any liability on the Sub-Contractor in respect of any negligence or breach of duty on the part of the Employer, the Contractor, other sub-contractors or their respective servants or agents nor create any privity of contract between the Sub-Contractor and the Employer or any other sub-contractor.

#### 6. INSURANCE AGAINST INJURY TO PERSONS AND PROPERTY

- 6.1 Without prejudice to his liability to indemnify the Contractor under clause 5.0 above, the Sub-Contractor shall maintain:-
  - 6.1.1 Such insurances as are necessary to cover the liability of the Sub-Contractor in respect of injury or damage to property including damage to the works arising out of or in the course of or by reason of the carrying out of the sub-contract works except for liability against the contingencies specified at clause 6.3 herein.
  - 6.1.2 The insurances required under sub clause 6.1.1 and 6.1.2 above shall be placed with insurers approved by the Contractor and the Architect.
  - 6.2 Notwithstanding the provisions of clause 23.0 of these conditions, the Contractor shall not be obliged to make payments to the Sub-Contractor before the said policies have been provided.
  - 6.3 Where clause 13.0 of the main contract applies, the sub-contract works, including materials and goods of the sub-Contractor delivered to the works, shall as regards loss or damage by the contingencies stated at clause 13.0 therein, namely, fire, earthquake, fire following earthquake, lightning, explosion, storm, tempest, flood, bursting or overflowing of water tanks, apparatus or pipes, aircraft and other aerial devices or articles dropped therefrom, riot and civil commotion, be at the sole risk of the contractor. The Contractor shall cover his liability for the works by procuring insurances as required in the said clause.
  - 6.4 Where clause 14.0 or 15.0 or the main contract applies, the sub-contract works, including materials and goods of the Sub-Contractor delivered to the works shall, as regards loss or damage by the contingencies stated therein be at the sole risk of the Employer. The Employer shall cover his liability for the works by procuring insurances as required in the said clause.

- 6.5 The Sub-Contractor shall observe and comply with the conditions contained in the policy or policies of insurance of the Contractor or of the Employer, as the case may be, as regards loss or damage which may be caused by the stated contingencies. For this purpose, the Contractor or the Employer as the case may be, shall avail the said policies to the Sub-Contractor for his perusal.
- 6.6 If any loss or damage affecting the sub-contract works or any part thereof or any unfixed goods or materials is occasioned by any one or more of the said contingencies, then,
- 6.6.1 The occurrence of such loss or damage shall be disregarded in computing any amounts payable to the Sub-Contractor under the sub-contract, and
- 6.6.2 The Sub-Contractor shall, with due diligence, restore the work damaged, replace or repair any unfixed materials or goods which have been destroyed or damaged, remove and dispose of any debris and proceed with the carrying out and completion of the sub-contract works.
  - 6.6.3 The restoration of work damaged the replacement and repair of unfixed materials and goods and the removal of debris shall be deemed to be a variation required by the Architect. Such work shall be paid for in accordance with clause 30.0 of the main contract.

#### 7.0 PERFORMANCE BOND

Before commencing the works, the Sub-Contractor shall provide one surety who must be an established bank or insurance company to the approval of the Contractor and who will be bound to the Contractor in the sum equivalent to ten per cent (10%) of the sub-contract price for the due performance of the sub-contract until the certified date of practical completion. Notwithstanding the provisions of clause 23.0 of these conditions, no payments shall made to the Sub-Contractor before the said bond is provided.

#### 8.0 POSSESSION OF SITE AND COMMENCEMENT OF WORKS

Within the period stated in the appendix to these conditions, the Contractor shall give possession of the site works to the Sub-Contractor and such access as may be necessary to enable the Sub-Contractor to commence and proceed with the sub-contract works in accordance with the sub-contract.

On or before the date for commencement of works stated in the appendix to these conditions, the Sub-Contractor shall commence the carrying out of the sub-contract works and shall proceed regularly and diligently with the same in accordance with the sub-contract programme, the main contract programme and or with the progress of the main contract works and complete on or before the date stated in the appendix to these conditions as the date for practical completion or within any extended time granted under clause 25.0 of these conditions.

#### 9.0 ARCHITECT'S INSTRUCTIONS

- 9.1 The Sub-Contractor shall forthwith comply with all the instructions issued to him by the Architect, either directly or through the Contractor, in regard to any matter in respect of which the Architect is expressly empowered by the main contract conditions to issue instructions.
- 9.2 The manner of complying with or querying the validity of an Architect's instruction shall be as provided in clause 22.0 of the main contract. The Sub-Contractor shall not be obliged to carry our instructions not issued in the manner provided therein.

#### 10.0 VARIATIONS

- 10.1 The term "variation" shall have the meaning assigned to it at clause 30.0 of the main contract.
  - 10.2 The valuation of variations shall be made by the Quantity Surveyor in accordance with sub-clause 30.6 of the main contract.
  - 10.3 Effect shall be given to the measurement and valuation of variations in interim certificates and by the adjustment of the sub-contract price.

#### 11.0 LIABILITY FOR OWN EQUIPMENT

The construction equipment and other property belonging to or provided by the Sub-Contractor and brought onto the site for carrying out the works shall be at the sole risk of the Sub-Contractor. Any loss or damage to the same or caused by the same shall, except for any loss or damage due to any negligence, omission or default of the Contractor, be at the sole risk of the Sub-Contractor who shall indemnify the Contractor against loss, damage or claims in respect thereof. Insurance against any such loss, damage or claims shall be the sole responsibility of the Sub-Contractor.

#### 12.0 PROVISION OF FACILITIES BY THE CONTRACTOR

- 12.1 Where provided in the main contract, the Contractor shall supply at his own cost all necessary water, lighting, electric power, telephones and security required for the sub-contract works. Where not so provided, the Sub-Contractor shall provide the said services at his own cost.
- 12.2 Except as otherwise provided in the main contract, the Sub-Contractor shall construct at his own expense all necessary workshops, stores, offices, workers' accommodation and other temporary buildings required for the carrying out of the works at such places on site as the Contractor shall identify. The Contractor undertakes to give the sub-Contractor the required space and all reasonable facilities for such construction. Upon practical completion of the works, the Sub-contractor shall remove the said facilities and reinstate disturbed surface to the satisfaction of the Contractor.
- 12.3 The Contractor shall provide, without charge, general attendance to the Contractor to facilitate the carrying out of the works which attendance shall include facilities for access to and movement within the site and sections or parts of the building or buildings where the sub-contract works are being carried out, the use of temporary roads, paths and access ways, sanitary and welfare facilities.
- 12.4 The Contractor shall permit the Sub-Contractor to use, without charge, at all reasonable times, any scaffolding and hoisting equipment belonging to or provided by the Contractor while it remains so erected upon the site. The use by the Sub-Contractor of any other equipment, facilities or services provided by the Contractor for the works shall be subject to private arrangements between the parties hereto and shall not be regulated by these conditions.
- 12.5 Provided that such use of the scaffolding and hoisting equipment shall be on the express condition that no warranty or other liability on the part of the Contractor shall be created or implied in regard to fitness, condition or suitability for the intended purpose except that the Sub-Contractor shall be liable for any damage caused thereto or thereby.
- Where required, the Contractor shall provide the facilities, equipment and the like and carry out any necessary builder' works within a reasonable time of the request by the Sub-Contractor to enable timely performance of the sub-contract.

#### 13.0 LIABILITY FOR OWN WORK

- 13.1 The Contractor and the Sub-Contractor shall be liable for the due carrying out of their respective works in accordance with their respective contracts without causing damage or injury to the works of the other sub-
- 13.2 Should the carrying out of the sub-contract works cause injury or damage to the main contract works, or to the work of the other sub-contractors, the Sub-contractor shall rectify the damage so caused at his own cost.
- 13.3 Should the carrying out of the main contract works cause damage or injury to the sub-contract works, the Contractor shall rectify the damage at his own cost.
- 13.4 If in the course of carrying out the sub-contract works, the Sub-Contractor is required to carry out work not included in his sub-contract by reason of any materials of workmanship not being in accordance with the main contract or with other sub-contracts, the Contractor shall reimburse the Sub-Contractor the expenses incurred therein.

#### 14.0 CO-OPERATION IN USE OF FACILITIES

- 14.1 The Contractor and the Sub-Contractor undertake to co-operate with each and co-ordinate work arrangements and procedures required in interference, disruption or disturbance to the progress of the works or to the activities of other sub-contractors.
- 14.2 The Contractor and the Sub-Contractor undertake not to wrongfully use or interfere with equipment, scaffolding, appliances, ways, temporary works, temporary buildings and other property belonging to or provided by the part or by other sub-contractors.
- 14.3 Provided that nothing contained in this clause shall prejudice or limit the rights of the Contractor or of the sub-Contractor in carrying out their respective statutory and or contractual duties under this sub-contract or under the main contract.

#### 15.0 ASSIGNMENT AND SUBLETTING

- 15.1 Neither the Contractor nor the Sub-Contractor shall, without the written consent of the other and the Employer, assign this sub-contract.
- 15.2 The Sub-Contractor shall not sub-let the whole of the works without the written consent of the Contractor and the Architect.

15.3 Provided that any assignment and any sub-contracts as well as this subcontract shall terminate immediately upon (for whatever reason) of the main contract.

#### 16.0 WORK PRIOR TO APPOINTMENT OF CONTRACTOR

- 16.1 Where the Sub-Contractor is appointed before the Contractor is appointed, any work done by the Sub-Contractor prior to the said appointment shall be treated as a separate contract between the Employer and the Sub- Contractor and shall be valued by the Quantity Surveyor and paid for directly by the Employer without the involvement of the Contractor.
- Where the Sub-Contractor is appointed before the Contractor is appointed, the Sub-Contractor shall be permitted, when the identity of the Contractor is known and within 30 days thereof, to raise objections (on reasonable grounds) against entering into a sub-contract with the Contractor
  - 16.3Where work which is outside the sub-contract is ordered directly by Employer or the Architect, that work shall be treated as a separate contract between the Sub-Contractor and the Employer and shall be valued and paid for directly to the Sub-Contractor in accordance with sub-clause 16.1 herein without the facilities and the like involvement of the Contractor. The cost of equipment, provided by the Contractor to the Sub- contractor and any builder's work carried out by the Contractor with regard to such work shall be paid directly by the Sub-Contractor to the Contractor.

#### SUB-CONTRACTOR DESIGN 17.0

Where the sub-contract includes a design component by the Sub-Contractor, the design shall be to the approval of the Architect and the Employer. Not withstanding and approvals, the Sub-Contractor shall be liable directly to the Employer for any consequences of failure of the design to comply with the requirements of the Employer or to be fit or suitable for the purposes for which the sub-contract works or the relevant part thereof were intended.

#### 18.0 SPECIFICATION OF GOODS, MATERIALS AND WORKMANSHIP

- All materials, goods and workmanship shall, so far as procurable, be of the 18.1 respective kinds and standards described in the sub-contract bills, specifications and drawings.
- The provisions of clause 23.0 of the main contract regulating the 18.2 procurement, specification and quality assurance of materials, processes and workmanship and the requirements of clause 24.0 therein dealing with the provision of samples and the carrying out of specified tests shall apply to the sub-contract in the same manner as they apply to the main contract.

#### 19.0 COMPLIANCE WITH STATUTORY AND OTHER REGULATIONS

The Sub-Contract shall comply with all statutory and other regulations of competent authorities regulating the carrying out of the works in accordance with the provisions of clause 17.0 of the main contract, as applicable.

#### 20.0 ROYALTIES AND PATENT RIGHTS

- All royalties or other sums payable in respect of the supply and use of any patented articles, processes or inventions in carrying out the works as described by or referred to in the sub-contract bills, specifications or drawings shall be deemed to have been included in the sub-contract price.
- 20.2 The provision of clause 25.0 of the main contract dealing with he same shall apply to the sub-contract in the same manner as they apply to the main contract.

#### 21.0 ANTIQUITIES AND OTHER OBJECTS OF VALUE

All fossils, antiquities and other objects of interest or value which may be found on the site or in excavating the same during the progress of the sub-contract shall be dealt with in accordance with the provisions of clause 44.0 of the main contract.

#### 22.0 SUSPENSION OF WORKS

22.1 An instruction by the Architect to postpone or suspend the works under clause 28.0 of the main contract shall have the same effect on the subcontract works as it has on the main contract works.

If the suspension arises due to default by the contractor and the sub- contract works are adversely effected by the suspension, the sub- contractor shall be entitled to reimbursement by the contractor of all expenses arising therefrom.

If the suspension arises due to default by the sub-contractor, the sub-contractor shall be liable to the contractor for all expenses arising therefrom.

A notice by the contractor to suspend the works under clause 29.0 of the main contract shall have the same effect on the sub-contract works as it has on the main contract works.

Should the sub-contract works be adversely affected by suspension under clause 29.0 of he main contract, the sub-contractor shall be entitled to the remedies provided for at clauses 25.0 and 26.0 of this sub-contract.

#### 23.0 PAYMENTS

- 23.1 Procedures for originating and processing applications for payments and payment certificates as regards the sub-contract works shall be the same as those prescribed for the Contractor in the main contract at clause 34.0. All references therein to the contractor shall be deemed to include references to the Sub-contractor.
- 23.2 Before submitting an application for payment to the Quantity Surveyor in accordance with clause 34.1 of the main contract, the Contractor shall give the Sub-Contractor a notice of not less than 7 days to submit the details of the amounts which the Sub-Contractor considers himself entitled to for the relevant period. Such details, when received, shall be annexed to the said Contractor's application.
- 23.3 Where it is necessary to measure the sub-contract works for purpose of valuation or for the preparation of the final account, the Quantity Surveyor shall give the Sub-Contractor a reasonable opportunity to be present at the time of the measurements and to take notes and measurements as he may require.
- Neither the Quantity Surveyor nor the Architect shall be bound to issue a valuation or a payment certificate in respect of the sub-contract works, as the case may be, whose value is less than the amount stated in the appendix to these conditions as the minimum amount of a payment certificate before the issue of the certificate of practical completion of the main contract or of the sub-contract, as applicable.
- 23.5 Provided that where the minimum amount of a certificate inserted in the appendix to these conditions has been achieved but the corresponding minimum inserted in the appendix to the main contract in respect of the Contractor's work has not been achieved, or the Contractor has not applied for payment within the stated period, the Architect may with the consent of the Contractor, issue a payment certificate directly to the Sub-Contractor for payment by the Employer.
- 23.6 Within 7 days of receipt by the Contractor of payment by the Employer, the Contractor shall notify and pay to the Sub-Contractor the total value certified therein in respect of the sub-contract works less the portion of the retention money attributable to the sub-contract works and less amounts previously paid to the Sub-Contractor.

- 23.7 Where certificates are not paid by the Employer within the prescribed period, the Sub-Contractor shall be entitled to be paid by the Contractor, upon receipt of payment from the Employer, the interest certified for the delay in accordance with sub-clause 34.6 of the main contract in respect of the portion of the sub-contract works included in the certificate.
- Where the Contractor has received payment from the Employer buthas not released the appropriate amount to the Sub-Contractor within the stated period, the Contractor shall pay to the Sub-Contractor in addition to the amount not paid, simple interest on the unpaid amount for the period it remains unpaid at the commercial bank lending rate in force during the period of default.
- 23.9 If, upon application by the Sub-Contractor and Architect agree, or if the Contractor fails to make payment to the Sub-Contractor in accordance with sub-clause 23.6 herein and continues such default for 14 days thereafter, the Architect may issue a payment certificate directly to the Sub-Contractor for payment by the Employer, where applicable, and deduct the amount from subsequent payment to the Contractor.
- 23.10 Upon the issue of the certificate of practical completion and the release of one half of the total amount of the retention of money to the Contractor, the Contractor shall pay the portion attributable to the sub-contract to the Sub-Contractor within 7 days of receipt of the payment.
- 23.11 Upon the issue of the certificate of rectification of defects and receipt of the balance of the retention money by the Contractor, the Contractor shall pay the balance of the portion of the retention money attributable to the sub-contract to the Sub-Contractor within 7 days of receipt of the payment.
- 23.12 The sub-contract final account shall be agreed between the Sub-Contractor, the Contractor, the Quantity Surveyor and the Architect and shall be annexed to the Contractor's final accounts which shall be agreed as provided for in the main contract. For purpose of finalizing the accounts, the Quantity Surveyor may request the Sub-Contractor to submit further documents as he may deemnecessary.
- 23.13 The final certificate issued under sub-clause 34.21 of the main contract shall be final and binding on the Sub-Contractor in the same manner it is binding on the Contractor.
- 23.14 If the Architect desires to secure final payment to the Sub-Contractor before final payment is due to the Contractor, the provisions of sub-clause 31.10 of the main contract shall apply.

23.15 The Contractor shall be entitled to deduct from or set off against any money due from him to the Sub-Contractor in interim certificates any sum Contractor is liable to pay to the Contractor arising under or in connection with the sub-contract.

#### 24.0 PRACTICAL COMPLETION AND DEFECTS LIABILITY

- 24.1 The Sub-Contractor shall proceed with the works regularly and diligently and complete the same within the period stated in the appendix to this sub- contract or within such extended period as may be granted under clause 25.0 of this sub-contract.
- Where the sub-contract works are to be completed in sections or where the sub-contract works are to be completed in advance of the main contract works, the provisions of clause 42.0 of the main contract shall apply, as appropriate, to the sub-contractor in the same manner as they apply to the main contract.
- 24.3 The procedures for certifying practical completion and for dealing with defects in the sub-contract works as well as the main contract works are as prescribed at clause 41.0 of the main contract. Upon the issue of the certificate of practical completion of the whole of the works or of the sub-contract works, as applicable, the Sub-contractor shall be entitled to release of one half of the retention money attributable to the sub-contract works within 7 days after the Contractor has received payment.
  - 24.4 The balance of the retention money shall be released to the Sub-Contractor after the defects appearing in the works have been rectified in accordance with subclause 41.6 and 41.7 of the main contract and after the Contractor has received the said payment as provided for in sub-clause 34.16.3 of the main contract.

#### 25.0 EXTENSION OF TIME

25.1 Upon it becoming reasonably apparent that the progress of the sub- contract works is or will be delayed, the Sub-Contractor shall forthwith give written notice of the cause of the delay to the Contractor and to the Architect with supporting details showing the extent of delay caused or likely to be caused. Thereafter, the Architect shall evaluate the information supplied by the Sub-Contractor and if in his opinion the completion of the works is likely to be or has been delayed beyond the date for practical

completion stated in the appendix to these conditions or beyond any extended time previsously fixed under this clause, by any of the reasons entitling the Contractor to extension of time under sub-clause 36.1 of the main contract, then the Architect shall, so soon as he is able estimate the length of the delay beyond the date or time aforesaid, recommend to the Contractor a fair and reasonable extension of time to be granted for the completion of the sub-contract works.

- 25.2 Thereupon, the Contractor shall grant in writing to the Sub-Contractor the recommended time. Provided that the Contractor shall not grant any extension of time to the Sub-Contractor without the written recommendation of the Architect.

  And provided that the Sub-Contractor shall constantly use his best endeavors to prevent delay and shall do all that may be reasonably required to proceed with the works.
- 25.3 The procedures for dealing with requests for extension of time and the observance of time limits prescribed at clause 36.0 of the main contract apply to the sub-contract in the same manner as they apply to the main contract.

#### 26.0 LOSS AND EXPENSE CAUSED BY DISTURBANCE OF REGULAR PROGRESS

- 26.1 If upon written application being made by the Sub-Contractor to the Contractor and to the Architect, the Architect is of the opinion that the Sub-Contractor has been involved in direct loss and or expense, for which he would not be reimbursed by a payment made under any other provision in this sub-contract, by reasons of the regular progress of the sub-contract works or any part thereof having been materially affected by any of the reasons which would entitle the Contractor to reimbursement under clause

  37.0 of the main contract, the Quantity Surveyor shall assess the amount of such loss and or expense.
- Any amount so assessed shall be added to the sub-contract price and if an interim certificate is issued after the date of assessment, any such amount shall be added to the amount which would otherwise be stated as due in such certificate as regards the Sub-Contractor's entitlement.
- The procedures for dealing with loss and or expense claims prescribed at clause 37.0 of the main contract shall apply to the sub-contract in the same manner as they apply to the main contract, as appropriate.

#### 27.0 DAMAGES FOR DELAY IN COMPLETION

- 27.1 If the Sub-Contractor fails to complete the sub-contract works by the date for practical completion stated in the appendix to these conditions or within any extended time fixed under clause 25.0 herein, and the Architect certifies in writing that in his opinion the same ought reasonably so to have been completed, then the Sub-Contractor shall pay or allow to the Contractor a sum calculated at the rate stated in the said appendix as liquidated damages for the period during which the works shall so remain or have remained incomplete.
- The Contractor may deduct such sum from any money due or to become due to the Sub-Contractor under the sub-contract or recover the same from the Sub-Contractor as a debt. Provided that the Contractor shall not be entitled to recover any liquidated damages from the Sub-Contractor without first obtaining the Architect's certificate of delay prescribed herein.

#### 28.0 FLUCTATIONS

- 28.1 Unless otherwise stated in the sub-contract bills or specifications, the sub-contract price shall be deemed to have been calculated to include all duties and taxes imposed by statutory and other competent authorities in the country where the works are being carried out, and
- 28.2 The Sub-Contractor shall observe and comply with the conditions contained in the policy or policies of insurance of the Contractor or of the Employer, as the case may be, as regards loss or damage which may be caused by the stated contingencies. For this purpose, the Contractor or the Employer as the case may be, shall avail the said policies to the Sub-Contractor for his perusal.
- 28.3 If any loss or damage affecting the sub-contract works or any part thereof or any unfixed goods or materials is occasioned by any one or more of the said contingencies, then
  - 28.3.1 The occurrence of such loss or damage shall be disregarded in computing any amounts payable to the Sub-Contractor under the sub-contract, and
  - 28.3.2 The Sub-Contractor shall, with due diligence, restore the work damaged, replace or repair any unfixed materials or goods which have been destroyed or damaged, remove and dispose of any debris and proceed with the carrying out and completion of the sub-contract works.

#### 27.0 DAMAGES FOR DELAY IN COMPLETION

- 27.1 If the Sub-Contractor fails to complete the sub-contract works by the date for practical completion stated in the appendix to these conditions or within any extended time fixed under clause 25.0 herein, and the Architect certifies in writing that in his opinion the same ought reasonably so to have been completed, then the Sub-Contractor shall pay or allow to the Contractor a sum calculated at the rate stated in the said appendix as liquidated damages for the period during which the works shall so remain or have remained incomplete.
- 27.2 The Contractor may deduct such sum from any money due or to become due to the Sub-Contractor under the sub-contract or remover the same the Sub-Contractor as a debt. Provided that the Contractor shall not be entitled to recover any liquidated damages from the Sub-Contractor without first obtaining the Architect's certificate of delay prescribed herein.

#### 28.0 FLUCTATIONS

- 28.1 Unless otherwise stated in the sub-contract bills or specifications, the sub-contract price shall be deemed to have been calculated to include all duties and taxes imposed by statutory and other competent authorities in the country where the works are being carried out, and
- 28.2 The sub-contract price shall be deemed to be based on currency exchange rates current at the date of tender as regards materials or goods to be specifically imported for permanent incorporation in the works.
- 28.3 Should duties, taxes and exchange rates vary during the period of the contract, compensation thereof shall be calculated in accordance with sub-clause 35.1 and 35.2 of the main contract.
- 28.4 Compensation for change in prices of goods and materials incorporated in the works and in the rates of wages provided for at sub-clause 35.3,35.4 and 35.5 of the main contract shall not apply to the sub-contract unless specifically provided for in the bill of quantities or specifications.

#### 29.0 TERMINATION OF MAIN CONTRACT

29.1 If, for any reason, the contractor's employment is terminated either under clause 38.0, 39.0 or 40.0 of the main contract, this sub-contract shall thereupon also terminate.

- 29.2 Upon termination, the sub-contractor shall ceases all work and vacate the site. He shall not remove any equipment or any materials brought onto the site for the carrying out of the works without the written approval of the contractor and the Architect
- 29.3 Where the termination of the main contract occurs without the default of sub-contractor, the sub-contractor shall be paid by the contractor for work done in the like manner as the Contractor is paid at clause 39.5 of the main contract.
- Where the termination of main contract arises from the default by the sub-contractor, the adjustment of the sub-contract accounts shall be performed in the like manner as is provided at sub-clause 38.8 of the main contract regarding the main contract accounts.

#### 30.0 TERMINATION OF SUB-CONTRACT.

- 30.1 Without prejudice to any other rights and remedies which the contractor may possess, if the sub-contractor shall make default in any one or more of the respects which would entitle the employer to terminate the main contract under clause 38.0 therein, the contractor shall give the sub-contractor a notice, with a copy to the Architect and to the employer by registered post of recorded delivery specifying the default. Should the sub-contractor continue the default for 14 days after receipt of such notice or at any time thereafter repeat such default and should the Architect certify that the sub-contractor is in default, the contractor may terminate the Sub-contract forthwith after the expiry of the notice provided that the notice is not given unreasonably or vexatiously. The termination letter shall be copied to the Architect and to the Employer.
- Where the sub-contract is terminated due to the default of the sub-contractor as in sub-clause 30.1 herein, the adjustment of sub-contract accounts shall be performed in the like manner as is provided at sub-clause 38.8 of the main contract regarding the main contract accounts.
- 30.3 Without prejudice to any other rights and remedies which the Sub-Contractor may possess, if the Contractor shall make default in one or more of the respects which, if committed by the Employer, would entitle the contractor to terminate the main ontract under clause 39.0 therein, the Sub-Contractor shall give the Contractor a notice, with a copy to the Architect and to the Employer, by registered post or recorded delivery specifying the default. Should the contractor continue the default for 14 days after receipt of such notice or at any time thereafter repeat such

default, and should the Architect certify that the contractor is in default, the Sub-Contractor may terminate the sub-contract forthwith after expiry of the notice, provided that the notice is not given unreasonably or vexatiously. The termination letter shall be copied to the Architect and to the Employer.

- 30.4 If the Sub-Contract is terminated due to the default of the Contractor as in sub-clause 30.3 herein, the Contractor shall pay the sub-contractor for work done in the like manner as the Contractor would be paid at sub-clause 39.5 of the main contract where the termination is done by the Contractor.
- 30.5 Where the sub-contract is terminated due to the default of the Contractor, all expenses arising from the termination shall be done wholly by the contractor and the termination shall not create any liability on the Employer.
- Where the sub-contract is terminated due to the default of the Sub-contractor, the sub-contractor shall be liable to the contractor for all expenses arising therefrom.

#### 31.0 SETTLEMENT OF DISPUTES

- In case any dispute or difference shall arise between the Contractor and Sub-Contractor, either during the progress or after the completion or abandonment of the sub-contract works, such dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within 30 days of the notice.
- 31.2 The dispute shall be referred to the arbitration and final decision of a person to be agreed by the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointment by the Association of Kenya or the Chairman or Vice Chairman of The Chartered Institute of Arbitrators, Kenya Branch, at the request of the applying party.
- The arbitration may be on the construction of this sub-contract or on any matter or thing of whatsoever nature arising thereunder or in connection therewith including the rights and liabilities of the parties during the currency of the sub-contract and subsequent to the termination of the sub- contract.

- Where the sub-contractor is aggrieved by the manner in which the Architect has exercised or failed to exercise his powers stipulated in the main contract, or in the subcontact or by any action or inaction of the Employer, and in particular, if he is aggrieved by:
  - 31.4.1 The failure or refusal of the Architect to recommend to the contractor an extension of sub-contract time, or
  - 31.4.2 The extend of the recommended time, or
  - 31.4.3 The amount certified to the sub-contractor either in an interim in a final certificate, or
  - 31.4.4 The issue of an instruction which the sub-contractor contends is not authorised by the main contract or the sub-contract, or
    - 31.4.5. Any other matter left to the discretion of the Architect in the main contract or in the sub-contract, then.
- 31.5 Subject to the Sub-Contractor giving the Contractor such indemnity and security as the Contractor may reasonably require, the Contractor shall allow the Sub-Contractor to use the contractor's name and, if necessary, shall join the Sub-Contractor in arbitration proceeding against the employer to decide the matters in dispute or in difference.
- Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference where notice has not been given by the applying party within 90 days of the occurrence or discovery of the matter or issue giving rise to the dispute or difference.
- 31.7 Notwithstanding the issue of a notice as stated above, the arbitration of such a dispute or difference shall not commence unless an attempt has in the first instance been made by the parties to settle such dispute or difference amicably with or without the assistance of third parties.
- 31.8 In any event, no arbitration shall commence earlier than 90 days after the service of the notice of a dispute or difference, except as provided for at sub-clause 31.9 herein.
- 31.9 Notwithstanding anything stated herein, the following matters may be referred to arbitration before the practical completion of the works or abandonment of the works or termination of the sub-contract without to comply with sub clause 31.8 herein.

- Whether or not the issue of an instruction by the Architect is authorized by the main contract or these conditions, and
- 31.9.2 Whether or not a payment certificate has been improperly withheld or is not in accordance with the main contract or these conditions or though issued, it has not been honoured.
- All other matters in dispute shall only be referred to arbitration after the practical completion or alleged practical completion of the works or abandonment of the works or termination or alleged termination of the sub-contract, unless the Architect the contractor and the sub-contractor agree otherwise in writing.
- 31.11 The Arbitrator shall, without prejudice to the generality of his powers, have power to direct such measurements, computations, tests, or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject or included in any payment certificate.
- 31.12 The Arbitrator shall, without prejudice to the generality of his powers, have power to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion decision, requirement or notice had been given.
- 31.13 Provided that any decision of the Architect which is final and binding on the contractor under the main contract shall be final and binding between the contractor and the sub-contractor.
- The award of such Arbitrator shall be final and binding upon the parties.

## SUB CONTRACTOR'S PERFORMANCE BOND

BY THIS AGREEMENT we	(SURETY)
of	
are bound to	(CONTRACTOR)
in the sum of Kenya shillings	
	(Kshs)
to be paid by us to the said	(CONTRACTOR)
WHEREAS by an agreement in wa	riting dated
	(SUB-CONTRACTOR)
entered into a sub-contract with	(CONTRACTOR)
•	ks therein stated in the manner and by the time with he provisions of the said sub-contract, namely:
executors, administrator, successor the sub-contract, of if on default by discharge the damages sustained b above written bond, then this oblig force and effect. Upon default, and	written bond is such that if the said sub-contractor, his is or assigns shall duly perform his obligations under by the sub-contractor the surety shall satisfy and by the contractor thereby up to the amount of the gation shall be void, otherwise it shall remain in full distributed without prejudice to his other rights under the sub-titled to demand forfeiture of the bond and we
of the said sub-contract or in the ex	by agreed and declared that no alteration in the terms attend or nature of the works to be carried out and no under the sub-contract shall in any way release the above written bond.
IN WITNESS whereof we have se	et out hand this day of
Surety	Witness
Authrorised of Power of Attoney N	No

APPENDIX	Clause
Name of sub-contractor's insurers	6.0
Name of sub-contractor's surety	7.0
Amount of surety	7.0
Period of possession of site	8.1
Date of commencement of works	8.2
Date for practical completion	8.2
Interval for application of payment certificates	23.1
Minimum amount of payment certificate	23.4
Percentage of certified value retained	23.6
Limit of retention fund, if any	23.6
Name of the sub-contractor's bank for purposes of interest calculation.	23.7,23.8
Defects liability period	23.11
Period of final measurement and valuation	23.12
Damages of delay in completion	27.1 at the rate of Kshs
Signed by the said:	

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**SUB-CONTRACTOR** 

CONTRACTOR

## 1.70 APPENDIX TO THE AGREEMENT AND CONDITIONS OF SUB-CONTRACT FOR BUILDING WORKS Kenya Building and Civil Engineering Contractors (KABCEC) document.

## 1. CLAUSE 7.0

Change to read ".....in the sum equivalent to five per cent (5%) of the subcontract...."

# **SECTION C**

# PRELIMINARIES AND GENERAL CONDITIONS

# PART C - PRELIMINARIES AND GENERAL CONDITIONS

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#### **PART C**

#### PRELIMINARIES AND GENERAL CONDITIONS

#### 3.01 Examination of Tender Documents

The tenderer is required to check the number of pages of this document and should he find any missing or indistinct, he must inform the Engineer at once and have the same rectified.

All tenderers shall be deemed to have carefully examined the following:

- a) Work detailed in the Specification and in the Contract Drawings.
- b) The Republic of Kenya Document "General Conditions of Contract for Electrical and Mechanical Works".
- c) Other documents to which reference is made.

He shall also be deemed to have included for any expenditure which may be incurred in conforming to the above items (a), (b), (c) and observe this expense as being attached to the contract placed for the whole or any part of the work.

The tenderer shall ensure that all ambiguities, doubts or obscure points of detail, are clarified with the Engineer before submission of his tender, as no claims for alleged deficiencies in the information given shall be considered after this date.

#### 3.02 Discrepancies

The Sub-contractor shall include all work either shown on the Contract Drawings or detailed in the specification. No claim or extra cost shall be considered for works which has been shown on the drawings or in the specification alone.

Should the drawing and the specification appear to conflict, the Sub-contractor shall query the points at the time of tendering and satisfy himself that he has included for the work intended, as no claim for extra payment on this account shall be considered after the contract is awarded.

#### 3.03 Conditions of Contract Agreement

The Sub-contractor shall be required to enter into a Sub-contract with the Main Contractor.

The Conditions of the Contract between the Main Contractor and the Sub-contractor as hereinafter defined shall be the latest edition of the Agreement and Schedule of Conditions of Kenya Association of Building and Civil Engineering Contractors as particularly modified and amended hereinafter.

For the purpose of this contract the Agreement and Schedule of Conditions and any such modifications and amendments shall read and construed together. In any event

of discrepancy the modifications and amendments shall prevail.

#### 3.04 Payment

Payment will be made through certificates to the Main Contractor, unless he specifically agrees to forego this right, in which case direct payment can be made to the Sub-contractor. All payments will be less retention as specified in the Main Contract. No payment will become due until materials are delivered to site.

#### 3.05 Definition of Terms

Throughout these contract documents units of measurements, terms and expressions are abbreviated and wherever used hereinafter and in all other documents they shall be interpreted as follows:

- i) **Employer:** The term "**Employer**" shall mean Medical Superintendent Kigumo Sub-District Hospital
- ii) Architect: The term "Architect" shall mean The Chief Architect,Ministry of TIPWH & UD, State Department for Public Works.
- ii) Quantity Surveyor: The term "Quantity Surveyor" shall mean
  The Chief Quantity Surveyor, Ministry of TIPWH & UD, State Department for Public
  Works.
- iii) Civil/Structural Engineers: The term "Civil/Structural Engineers" shall mean The Chief Structural Engineer,
- v) Engineer: The term "Engineer" shall mean Chief Engineer Mechanical Engineer (BS), Ministry of TIPWH & UD, State Department for Public Works.
- vi) **Main Contractor:** The term "**Main Contractor**" shall mean the firm or company appointed to carry out the Building Works and shall include his or their heir, executors, assigns, administrators, successors, and duly appointed representatives.
- vii) **Sub-contractor:** The term "**Sub-contractor**" shall mean the persons or person, firm or Company whose tender for this work has been accepted, and who has entered into a contract agreement with the Contractor for the execution of the Sub-contract Works, and shall include his or their heirs, executors, administrators, assigns, successors and duly appointed representatives.

- viii) **Sub-contract Works:** The term "**Sub-contract Works**" shall mean all or any portion of the work, materials and articles, whether the same are being manufactured or prepared, which are to be used in the execution of this Sub-contract and whether the same may be on site or not.
- x) **Contract Drawings:** The term "**Contract Drawings**" shall mean those drawings required or referred to herein and forming part of the Bills of Quantities.
- xi) **Working Drawings:** The term "**Working Drawings**" shall mean those drawings required to be prepared by the Sub-contractor as hereinafter described.
- xii) **Record Drawings:** The term "**Record Drawings**" shall mean those drawings required to be prepared by the Sub-contractor showing "as installed" and other records for the Sub-contract Works.
- xii) Abbreviations:

CM shall mean Cubic Metre

SM shall mean Square Metre

LM shall mean Linear Metre

LS shall mean Lump Sum

mm shall mean Millimetres

No. shall mean Number

Kg. shall mean Kilogramme

BS shall mean. Current standard British Standard Specification published by the British Standard Institution, 2 Park Street, London W1, England

KEBS hall mean Kenya Bureau of Standards

"Ditto" shall mean the whole of the preceding description in which it occurs. Where it occurs in description of succeeding item it shall mean the same as in the first description of the series in which it occurs except as qualified in the description concerned. Where it occurs in brackets it shall mean the whole of the preceding description which is contained within the appropriate brackets.

#### 3.06 Site Location

The site of the sub-contract Works is situated in Kigumo Sub County in Muranga.

The tenderer is recommended to visit the site and shall be deemed to have satisfied himself with regard to access, possible conditions, the risk of injury or damage to property on/or adjacent to the site, and the conditions under which the contract Works shall have to be carried out and no claims for extras will be considered on account of lack of knowledge in this respect.

#### 3.07 <u>Duration of Sub-Contract</u>

The Sub-Contractor shall be required to phase his work in accordance with programme (or its revision).

#### 3.08 Scope of Sub-Contract Works

The sub-contractor shall supply, deliver, unload, hoist, fix, test, commission and hand-over in satisfactory working order the complete installations specified hereinafter and/or as shown on the Sub-Contract Drawings attached hereto, including the provision of labour, transport and plant for unloading material and storage, and handling into position and fixing, also the supply of ladders, scaffolding the other mechanical devices to plant, installation, painting, testing, setting to work, the removal from site from time to time of all superfluous material and rubbish caused by the works.

The sub-contractor shall supply all accessories, whether of items or equipment supplied by the Main Contractor but to be fixed and commissioned under this Sub-contract.

#### 3.09 Extent of the Sub-con tr actor 's Dut ies

At the commencement of the works, the Sub-contractor shall investigate and report to the Engineer if all materials and equipment to be used in the work and not specified as supplied by the others are available locally. If these materials and equipment are not available locally, the Sub-contractor shall at this stage place orders for the materials in question and copy the orders to the Engineer. Failure to do so shall in no way relieve the Sub-contractor from supplying the specified materials and equipment in time.

Materials supplied by others for installation and/or connection by the Subcontractor shall be carefully examined in the presence of the supplier before installation and connection. Any defects noted shall immediately be reported to the Engineer.

The Sub-contractor shall be responsible for verifying all dimensions relative to his work by actual measurements taken on site.

The Sub-contractor shall mark accurately on one set of drawings and indicate all alterations and/or modifications carried out to the designed system during the construction period. This information must be made available on site for inspection by the Engineer.

#### 3.10 Execution of the Works

The works shall be carried out strictly in accordance with:

a) All relevant Kenya Bureau of Standards Specifications.

- b) All relevant British Standard Specifications and Codes of Practice (hereinafter referred to as B.S. and C.P. respectively).
- c) This Specification.
- d) The Contract Drawings.
- e) The Bye-laws of the Local Authority.
- f) The Architect's and/or Engineer's Instructions.

The Contract Drawings and Specifications to be read and construed together.

#### 3.11 Validity of Tender

The tender shall remain valid for acceptance within **120 days** from the final date of submission of the tender, and this has to be confirmed by signing the Tender Bond. The tenderer shall be exempted from this Bond if the tender was previously withdrawn in writing to the Employer before the official opening.

#### 3.12 <u>Firm – Price Sub-contract</u>

Unless specifically stated in the documents or the invitation to tender, this is a firm-price Contract and the Sub-contractor must allow in his tender for the increase in the cost of labour and/or materials during the duration of the contract. No claims will be allowed for increased costs arising from the fluctuations in duties and/or day to day currency fluctuations. The Sub-contractor will be deemed to have allowed in his tender for any increase in the cost of materials which may arise as a result of currency fluctuation during the contract period.

#### 3.13 Variation

No alteration to the Sub-contract Works shall be carried out until receipt by the Sub-contractor of written instructions from the Project Manager.

Any variation from the contract price in respect of any extra work, alteration or omission requested or sanctioned by the Architect or Engineer shall be agreed and confirmed in writing at the same time such variations are decided and shall not affect the validity of the Contract. Schedule of Unit Rates shall be used to assess the value of such variations. No allowance shall be made for loss of profit on omitted works.

Where the Architect requires additional work to be performed, the Sub-contractor, if he considers it necessary, will give notice within seven (7) days to the Main Contractor of the length of time he (the Sub-contractor) requires over and above that allotted for completion of the Sub-contract.

If the Sub-contractor fails to give such notice he will be deemed responsible for the claims arising from the delay occasioned by reason of such extension of time.

#### 3.14 Prime Cost and Provisional Sums

A specialist Sub-contractor may be nominated by the Architect to supply and/or install any equipment covered by the Prime Cost or Provisional Sums contained within the Sub-contract documents.

The work covered by Prime Cost and Provisional Sums may or may not be carried out at the discretion of the Architect.

The whole or any part of these sums utilized by the Sub-contractor shall be deducted from the value of the Sub-contract price when calculating the final account.

#### 3.15 <u>Bond</u>

The tenderer must submit with his tender the name of one Surety who must be an established Bank only who will be willing to be bound to the Main Contractor for an amount equal to 7½ % of the Subcontract amount.

#### 3.16 Government Legislation and Regulations

The Sub-contractor's attention is called to the provision of the Factory Act 1972 and subsequent amendments and revisions, and allowance must be made in his tender for compliance therewith, in so far as they are applicable.

The Sub-contractor must also make himself acquainted with current legislation and any Government regulations regarding the movement, housing, security and control of labor, labor camps, passes for transport, etc.

The Sub-contractor shall allow for providing holidays and transport for work people, and for complying with Legislation, Regulations and Union Agreements.

#### 3.17 Import Duty and Value Added Tax

The Sub-contractor will be required to pay full Import Duty and Value Added Tax on all items of equipment, fittings and plant, whether imported or locally manufactured. The tenderer shall make full allowance in his tender for all such taxes.

#### 3.18 <u>Insurance Company Fees</u>

Attention is drawn to the tenderers to allow for all necessary fees, where known, that may be payable in respect of any fees imposed by Insurance Companies or statutory authorities for testing or inspection.

No allowance shall be made to the Sub-contractor with respect to fees should these have been omitted by the tenderer due to his negligence in this respect.

#### 3.19 Provision of Services by the Main Contractor

In accordance with Clause 3.08 of this Specification the Main Contractor shall make the following facilities available to the Sub-contractor:

- a) Attendance on the Sub-contractor and the carrying out of all work affecting the structure of the building which may be necessary, including all chasing, cutting away and making good brickwork, etc., except that all plugging for fixing, fittings, machinery, fan ducting, etc., and all drilling and tapping of steel work shall be the responsibility of the Sub-contractor. Any purpose made fixing brackets shall not constitute Builder's Work and shall be provided and installed by the Sub-contractor unless stated hereinafter otherwise.
- b) The provision of temporary water, lighting and power: All these services utilised shall be paid for by the Main Contractor. The Sub-contractor shall, however, allow for additional connections/extensions required for his purposes.
- c) Fixing of anchorage and pipe supports in the shuttering, except that all anchorage shall be supplied by the Sub-contractor who shall also supply the Main Contractor with fully dimensioned drawings detailing the exact locations.
- d) i) Provision of scaffolding, cranes, etc. but only in so far as it is required for the Main Contract Works. It shall be the Sub-contractor's responsibility to liaise with the Main Contractor to ensure that there is maximum co-operation with other Sub-contractors in the use of scaffolding, cranes, etc.
  - ii) Any specialist scaffolding, cranes, etc. by the Sub-contractor for his own exclusive the Sub-contractor shall pay for use.

#### 3.20 Suppliers

The Sub-contractor shall submit names of any supplier for the materials to be incorporated, to the Engineer for approval. The information regarding the names of the suppliers may be submitted at different times, as may be convenient, but no sources of supply will be changed without prior approval.

Each supplier must be willing to admit the Engineer or his representative to his premises during working hours for the purpose of examining or obtaining samples of the materials in question.

#### 3.21 Samples and Materials Generally

The Sub-contractor shall, when required, provide for approval at no extra cost, samples of all materials to be incorporated in the works. Such samples, when approved, shall be retained by the Engineer and shall form the standard for all such materials incorporated.

#### 3.22 Administrative Procedure and Contractual Responsibility

Wherever within the Specification it is mentioned or implied that the Sub-contractor shall deal direct with the Employer or Engineer, it shall mean "through the Contractor" who is responsible to the Employer for the whole of the works including the Sub-contract Works.

#### 3.23 Bills of Quantities

The Bills of Quantities have been prepared in accordance with the standard method of measurement of Building Works for East Africa, first Edition, Metric, 1970. All the Quantities are based on the Contract Drawings and are provisional and they shall not be held to gauge or to limit the amount or description of the work to be executed by the Sub-contractor but the value thereof shall be deducted from the Sub-contract Sum and the value of the work ordered by the Engineer and executed there under shall be measured and valued by the Engineer in accordance with the conditions of the Sub-contract.

All work liable to adjustment under this Sub-contract shall be left uncovered for a reasonable time to allow measurements needed for such adjustment to be taken by the Engineer. Immediately the work is ready for measuring the Sub-contractor shall give notice to the Engineer to carry out measurements before covering up. If the Sub-contractor shall make default in these respects he shall, if the Engineer or Project Manager so directs, uncover the work to enable the necessary measurements to be taken and afterwards reinstate at his own expense.

#### 3.24 Sub-con tr actor 's Off ice in Kenya

The Sub-contractor shall maintain (after first establishing if necessary) in Kenya an office staffed with competent Engineer Manager and such supporting technical and clerical staff as necessary to control and coordinate the execution and completion of the Sub-contract Works.

The Engineer Manager and his staff shall be empowered by the Sub-contractor to represent him at meetings and in discussions with the Main Contractor, the Engineer and other parties who may be concerned and any liaison with the Sub-contractor's Head Office on matters relating to the design, execution and completion of the Sub-contract Works shall be effected through his office in Kenya.

It shall be the Sub-contractor's responsibility to procure work permits, entry permits, licences, registration, etc., in respect of all expatriate staff.

The Sub-contractor shall prepare a substantial proportion of his Working Drawings at his office in Kenya. No reasons for delays in the preparation or submission for approval or otherwise of such drawings or proposals will be accepted on the grounds that the Sub-contractor's Head Office is remote from his office in Nairobi or the site of the Sub-contract Works or otherwise.

#### 3.25 Builder's Work

All chasing, cutting away and making good will be done by the Main Contractor but the Sub-contractor shall mark out in advance and shall be responsible for accuracy of the size and position of all holes and chases required.

The Sub-contractor shall drill and plug holes in floors, walls, ceiling and roof for securing services and equipment requiring screw or bolt fixings.

Any purpose made fixing brackets shall not constitute builder's work and shall be provided and installed by the Sub-contractor unless stated hereinafter to the contrary.

#### 3.26 Structural Provision for the Works

Preliminary major structural provision has been made for the Sub-contract Works based on outline information ascertained during the preparation of the Specification.

The preliminary major structural provision made will be deemed as adequate unless the Sub-contractor stated otherwise when submitting his tender.

Any major structural provision or alteration to major structural provisions required by the Sub-contractor shall be shown on Working Drawings to be submitted to the Engineer within 30 days of being appointed.

No requests for alterations to preliminary major structural provisions will be approved except where they are considered unavoidable by the Engineer. In no case will they be approved if building work is so far advanced as to cause additional costs or delays in the work of the Main Contractor.

#### 3.27 <u>Position of Services, Plant, Equipment, Fittings and Apparatus</u>

The Contract Drawings give a general indication of the intended layout. The position of the equipment and apparatus, and also the exact routes of the ducts, main and distribution pipework shall be confirmed before installation is commenced. The exact siting of appliances, pipework, etc., may vary from that indicated.

The routes of services and positions of apparatus shall be determined by the approved dimensions detailed in the Working Drawings or on site by the Engineer in consultation with the Sub-contractor or the Main Contractor.

Services throughout the ducts shall be arranged to allow maximum access along the ducts and the services shall be readily accessible for maintenance. Any work which has to be re-done due to negligence in this respect shall be the Sub-contractor's responsibility.

The Sub-contractor shall be deemed to have allowed in his Sub-contract Sum for locating terminal points of services (e.g. lighting, switches, socket outlets, lighting points, control switches, thermostats and other initiating devices, taps, stop cocks) in positions plus or minus 1.2m horizontally and vertically from the locations shown on Contract Drawings. Within these limits no variations in the Sub-contract Sum will be made unless the work has already been executed in accordance with previously approved Working Drawings and with the approval of the Engineer.

#### 3.28 Checking of Work

The Sub-contractor shall satisfy himself to the correctness of the connections he makes to all items of equipment supplied under the Sub-contract agreement and equipment supplied under other contracts before it is put into operation. Details of operation, working pressures, temperatures, voltages, phases, power rating, etc., shall be confirmed to others and confirmation received before the system is first operated.

#### 3.29 Setting to Work and Regulating System

The Sub-contractor shall carry out such tests of the Sub-contract Works as required by British Standard Specifications, or equal and approved codes as specified hereinafter and as customary.

No testing or commissioning shall be undertaken except in the presence of and to the satisfaction of the Engineer unless otherwise stated by him (Sub-contractor's own preliminary and proving tests excepted).

It will be deemed that the Sub-contractor has included in the Sub-contract Sum for the costs of all fuel, power, water and the like, for testing and commissioning as required as part of the Sub-contract Works. He shall submit for approval to the Engineer a suitable programme for testing and commissioning. The Engineer and Employer shall be given ample warning in writing, as to the date on which testing and commissioning will take place.

The Sub-contractor shall commission the Sub-contract Works and provide attendance during the commissioning of all services, plant and apparatus connected under the Sub-contract Agreement or other Sub-contract Agreements, related to the project.

Each system shall be properly balanced, graded and regulated to ensure that correct distribution is achieved and where existing installations are affected, the Sub-contractor shall also regulate these systems to ensure that their performance is maintained.

The proving of any system of plant or equipment as to compliance with the Specification shall not be approved by the Engineer, except at his discretion, until tests have been carried out under operating conditions pertaining to the most onerous conditions specified except where the time taken to obtain such conditions is unreasonable or exceeds 12 months after practical completion of the Sub-contract Works.

#### 3.30 <u>Identification of Plant Components</u>

The Sub-contractor shall supply and fix identification labels to all plant, `starters switches and items of control equipment including valves, with white traffolyte or equal labels engraved in red lettering denoting its name, function and section controlled. The labels shall be mounted on equipment and in the most convenient positions. Care shall be taken to ensure the labels can be read without difficulty. This requirement shall apply also to major components of items of control equipment.

Details of the lettering of the labels and the method of mounting or supporting shall be forwarded to the Engineer for approval prior to manufacture.

#### 3.31 Contract Drawings

The Contract Drawings when read in conjunction with the text of the Specification, have been completed in such detail as was considered necessary to enable competitive tenders to be obtained for the execution and completion of the Sub-contract works.

The Contract Drawings are not intended to be Working Drawings and shall not be used unless exceptionally they are released for this purpose.

#### 3.32 Working Drawings

The Sub-contractor shall prepare such Working Drawings as may be necessary. The Working Drawings shall be complete in such detail not only that the Sub-contract Works can be executed on site but also that the Engineer can approve the Sub-contractor's proposals, detailed designs and intentions in the execution of the Sub-contract Works.

If the Sub-contractor requires any further instructions, details, Contract Drawings or information drawings to enable him to prepare his Working Drawings or proposals, the Sub-contractor shall accept at his own cost, the risk that any work, commenced or which he intends to commence at site may be rejected.

The Engineer, in giving his approval to the Working Drawings, will presume that any necessary action has been, or shall be taken by the Sub-contractor to ensure that the installations shown on the Working Drawings have been cleared with the Main Contractor and any other Sub-contractors whose installations and works might be affected.

If the Sub-contractor submits his Working Drawings to the Engineer without first liaising and obtaining clearance for his installations from the Main Contractor and other Sub-contractors whose installations and works might be affected, then he shall be liable to pay for any alterations or modification to his own, the Main Contractor's or other Sub-contractor's installations and works, which are incurred, notwithstanding any technical or other approval received from the Engineer.

Working Drawings to be prepared by the Sub-contractor shall include but not be restricted to the following:

- <u>a)</u> Any drawings required by the Main Contractor, or Engineer to enable structural provisions to be made including Builder's Working Drawings or Schedules and those for the detailing of holes, fixings, foundations, cables and paperwork ducting below or above ground or in or outside or below buildings.
- <u>b</u>) General Arrangement Drawings of all plant, control boards, fittings and apparatus or any part thereof and of installation layout arrangement of such plant and apparatus.
- <u>c)</u> Schematic Layout Drawings of services and of control equipment.
- d) Layout Drawings of all embedded and non-embedded paperwork, ducts and electrical conduits.

- e) Complete circuit drawings of the equipment, together with associated circuit description.
- <u>f)</u> Such other drawings as are called for in the text of the Specification or Schedules or as the Engineer may reasonably require.

Three copies of all Working Drawings shall be submitted to the Engineer for approval. One copy of the Working Drawings submitted to the Engineer for approval shall be returned to the Sub-contractor indicating approval or amendment therein.

Six copies of the approved Working Drawings shall be given to the Main Contractor by the Sub-contractor for information and distribution to other Sub-contractors carrying out work associated with or in close proximity to or which might be affected by the Sub-contract Works.

Approved Working Drawings shall not be departed from except as may be approved or directed by the Engineer.

Approval by the Engineer of Working Drawings shall neither relieve the Sub-contractor of any of his obligations under the Sub-contract nor relieve him from correcting any errors found subsequently in the Approved Working Drawings or other Working Drawings and in the Sub-contract Works on site or elsewhere associated therewith.

The Sub-contractor shall ensure that the Working Drawings are submitted to the Architect for approval at a time not unreasonably close to the date when such approval is required. Late submission of his Working Drawings will not relieve the Sub-contractor of his obligation to complete the Sub-contract Works within the agreed Contract Period and in a manner that would receive the approval of the Architect.

#### 3.33 Record Drawings (As Installed) and Instructions

During the execution of the Sub-contract Works the Sub-contractor shall, in a manner approved by the Engineer record on Working or other Drawings at site all information necessary for preparing Record Drawings of the installed Sub-contract Works. Marked-up Working or other Drawings and other documents shall be made available to the Engineer as he may require for inspection and checking.

Record Drawings, may, subject to the approval of the Engineer, include approved Working Drawings adjusted as necessary and certified by the Sub-contractor as a correct record of the installation of the Sub-contract Works.

They shall include but not restricted to the following drawings or information:

<u>a)</u> Working Drawings amended as necessary but titled "Record Drawings" and certified as a true record of the "As Installed" Sub-contract Works. Subject to the approval of the Engineer such Working Drawings as may be inappropriate may be omitted.

- <u>b)</u> Fully dimensioned drawings of all plant and apparatus.
- <u>c)</u> General arrangement drawings of equipment, other areas containing plant forming part of the Sub-contract Works and the like, indicating the accurate size and location of the plant and apparatus suitability cross-referenced to the drawings mentioned in (b) above and hereinafter.
- <u>d</u>) Routes, types, sizes and arrangement of all pipework and ductwork including dates of installation of underground pipework.
  - e) Relay adjustment charts and manuals.
- <u>f)</u> Routes, types, sizes and arrangement of all electric cables, conduits, ducts and wiring including the dates of installation of buried works.
- g) System schematic and trunking diagrams showing all salient information relating to control and instrumentation.
- <u>h)</u> Grading Charts.
- i) Valve schedules and locations suitability cross-referenced.
- j) Wiring and piping diagrams of plant and apparatus.
- <u>k)</u> Schematic diagrams of individual plant, apparatus and switch and control boards. These diagrams to include those peculiar to individual plant or apparatus and also those applicable to system operation as a whole.
- 1) Operating Instruction

Schematic and wiring diagrams shall not be manufacturer's multipurpose general issue drawings. They shall be prepared specially for the Sub-contract Works and shall contain no spurious or irrelevant information.

Marked-up drawings of the installation of the Sub-contract Works shall be kept to date and completed by the date of practical or section completion. Two copies of the Record Drawings of Sub-contract Works and two sets of the relay adjustment and grading charts and schematic diagrams on stiff backing shall be provided not later than one month later.

The Sub-contractor shall supply for fixing in sub-stations, switch-rooms, boiler houses, plant rooms, pump houses, the office of the Maintenance Engineer and other places, suitable valve and instructions charts, schematic diagrams of instrumentation and of the electrical reticulation as may be requested by the Engineer providing that the charts, diagrams, etc., relate to installations forming part of the Sub-contract Works. All such charts and diagrams shall be of suitable plastic material on a stiff backing and must be approved by the Engineer before final printing.

Notwithstanding the Sub-contractor's obligations referred to above, if the Sub-contractor fails to produce to the Engineer's approval, either:-

- a) The Marked-up Drawings during the execution of the Sub-contract Works or
- <u>b)</u> The Record Drawings, etc., within one month of the Section or Practical Completion

The Engineer shall have these drawings produced by others. The cost of obtaining the necessary information and preparing such drawings, etc., will be recovered from the Sub-contractor.

#### 3.34 Maintenance Manual

<u>a)</u>

Upon Practical Completion of the Sub-contract Works, the Sub-contractor shall furnish the Engineer four copies of a Maintenance Manual relating to the installation forming part of all of the Sub-contract Works.

The manual shall be loose-leaf type, International A4 size with stiff covers and cloth bound. It may be in several volumes and shall be sub-divided into sections, each section covering one Engineering service system. It shall have a ready means of reference and a detailed index.

There shall be a separate volume dealing with Air Conditioning and Mechanical Ventilation installation where such installations are included in the Sub-contract Works.

The manual shall contain full operating and maintenance instructions for each item of equipment, plant and apparatus set out in a form dealing systematically with each system. It shall include as may be applicable to the Sub-contract Works the following and any other items listed in the text of the Specifications:

<u>b)</u>	Plant
<u>c)</u>	Valve Operation
<u>d)</u>	Switch Operation
<u>e)</u>	Procedure of Fault Finding
<u>f)</u>	Emergency Procedures
<u>g)</u>	Lubrication Requirements
<u>h)</u>	Maintenance and Servicing Periods and Procedures
<u>i)</u>	Colour Coding Legend for all Services

System Description.

- <u>i)</u> Schematic and Writing Diagrams of Plant and Apparatus
- <u>k)</u> Record Drawings, true to scale, folded to International A4 size
- 1) Lists of Primary and Secondary Spares.

The manual is to be specially prepared for the Sub-contract Works and manufacturer's standard descriptive literature and plant operating instruction cards will not be accepted for inclusion unless exceptionally approved by the Engineer. The Sub-contractor shall, however, affix such cards, if suitable, adjacent to plant and apparatus. One spare set of all such cards shall be furnished to the Engineer.

#### 3.35 Hand-over

The Sub-contract Works shall be considered complete and the Maintenance and Defects Liability Period shall commence only when the Sub-contract Works and supporting services have been tested, commissioned and operated to the satisfaction of the Engineer and officially approved and accepted by the Employer, provided always that the handing over of the Sub-contract Works shall be coincident with the handing over of the Main Contract Works.

The procedure to be followed will be as follows:

- a) On the completion of the Sub-contract Works to the satisfaction of the Engineer and the Employer, the Sub-contractor shall request the Engineer, at site to arrange for handing over.
   b) The Engineer shall arrange a Hand-over Meeting or a series thereof, at site.
  - The Engineer shall arrange a Hand-over Meeting or a series thereof, at site.

    The Sub-contractor shall arrange with the Engineer and Employer for a complete demonstration of each and

every service to be carried out and for instruction to be given to the relevant operation staff and other representatives of the Employer.

In the presence of the Employer and the Engineer, Hand-over will take place, subject to Agreement of the Hand-over Certificates and associated check lists.

#### 3.36 Painting

c)

It will be deemed that the Sub-contractor allowed for all protective and finish painting in the Sub-contract Sum for the Sub-contract Works, including colour coding of service pipework to the approval of the Engineer. Any special requirements are described in the text of the Specifications.

#### 3.37 Spares

The Sub-contractor shall supply and deliver such spares suitably protected and boxed to the Engineer's approval as are called for in the Specifications or in the Price Schedules.

#### 3.38 <u>Testing and Inspection – Manufactured Plant</u>

The Engineer reserves the right to inspect and test or witness of all manufactured plant equipment and materials.

The right of the Engineer relating to the inspection, examination and testing of plant during manufacture shall be applicable to Insurance companies and inspection authorities so nominated by the Engineer.

The Sub-contractor shall give two week's notice to the Engineer of his intention to carry out any inspection or tests and the Engineer or his representative shall be entitled to witness such tests and inspections.

Six copies of all test certificates and performance curves shall be submitted as soon as possible after the completion of such tests, to the Engineer for his approval.

Plant or equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Sub-contractor's own risk and should the test certificate not be approved new tests may be ordered by the Engineer at the Sub-contractor's expense.

The foregoing provisions relate to tests at manufacturer's works and as appropriate to those carried out at site.

#### 3.39 Testing and Inspection -Installation

Allow for testing each section of the Sub-contract Works installation as described hereinafter to the satisfaction of the Engineer.

#### 3.40 Labour Camps

The Sub-contractor shall provide the necessary temporary workshop and mess-room in position to be approved by the Project Manager.

The work people employed by the Sub-contractor shall occupy or be about only that part of the site necessary for the performance of the work and the Sub-contractor shall instruct his employees accordingly.

If practicable, W.C. accommodation shall be allocated for the sole use of the Sub-contractor's workmen and the Sub-contractor will be required to keep the same clean and disinfected, to make good any damage thereto and leave in good condition.

#### 3.41 Storage of Materials

Space for storage will be provided by the Main Contractor but the Sub-contractor will be responsible for the provision of any lock-up sheds or stores required.

Nominated Sub-contractors are to be made liable for the cost of any storage accommodation provided specially for their use. No materials shall be stored or stacked on suspended slabs without the prior approval of the Architect.

#### 3.42 Initial Maintenance

The Sub-contractor shall make routine maintenance once a month during the liability for the Defects Period and shall carry out all necessary adjustments and repairs, cleaning and oiling of moving parts. A monthly report of the inspection and any works done upon the installation shall be supplied to the Engineer.

The Sub-contractor shall also provide a 24 -hour break-down service to attend to faults on or malfunctioning of the installation between the routine visits of inspection.

The Sub-contractor shall allow in the Sub-contract Sum of the initial maintenance, inspection and breakdown service and shall provide for all tools, instruments, plant and scaffolding and the transportation thereof, as required for the correct and full execution of these obligations and the provision, use or installation of all materials as oils, greases, sandpaper, etc., or parts which are periodically renewed such as brake linings etc., or parts which are faulty for any reason whatsoever excepting always Acts of God such as storm, tempest, flood, earthquake and civil revolt, acts of war and vandalism.

#### 3.43 Maintenance and Servicing After Completion of the Initial Maintenance

The Sub-contractor shall, if required, enter into a maintenance and service agreement with the employer for the installation for a period of up to five years from the day following the last day of the liability for Defects Period which offers the same facilities as specified in Clause 1.41 (Initial Maintenance).

The terms of any such agreement shall not be less beneficial to the employer than the terms of Agreements for either similar installation.

The Sub-contractor shall submit with his tender for the works, a firm quotation for the maintenance and service of the installation as specified herein, which shall be based upon the present day costs and may be varied only to take into account increases in material and labour unit rate costs between the time of tendering and the signing of the formal maintenance

and service agreement and which shall remain valid and open for acceptance by the Employer to and including the last day of the fifth complete calendar month following the end of the liability for Defects Period.

#### 3.44 Trade Names

Where trade names of manufacturer's catalogue numbers are mentioned in the Specification or the Bills of Quantities, the reference is intended as a guide to the type of article or quality of material required. Alternate brands of equal and approved quality will be acceptable.

#### 3.45 Water and Electricity for the Works

These will be made available by the Main Contractor. The Sub-contractor shall be liable for the cost of any water or electric current used and for any installation provided especially for their own use by the Main Contractor.

#### 3.46 Protection

The Sub-contractor shall adequately cover up and protect his own work to prevent injury and also to cover up and protect from damage all parts of the building or premises where work is performed by him under the Contract.

#### 3.47 Defects After Completion

The defects liability period will be six months from the date of completion of the Main Contract as certified by the Engineer.

#### 3.48 Damages for Delay

Liquidated and Ascertained damages as stated in the Main Contract Agreement will be claimed against the Main Contract for any unauthorised delay in completion. The Sub-contractor shall be held liable for the whole or a portion of these damages should he cause delay in completion.

#### 3.49 <u>Clear Away on Completion</u>

The Sub-contractor shall, upon completion of the works, at his own expense, remove and clear away all plant, equipment, rubbish and unused materials, and shall leave the whole of the works in a clean and tidy state, to the satisfaction of the Engineer. On completion, the whole of the works shall be delivered up clean, complete and perfect in every respect to the satisfaction of the Engineer.

#### 3.50 Final Account

On completion of the works the Sub-contractor shall agree with the Engineer the value of any variations outstanding and as soon as possible thereafter claimed sub-divided as follows:

submit to the Engineer his final statement of account showing the total sum claimed sub-divided as follows:

Statement A - detailing the tender amounts less the Prime Cost and Provisional Sums, included therein.

Statement B - detailing all the variation orders issued on the contract.

Statement C - Summarising statement A and B giving the net grand total due to the Sub-contractor for the execution of the Sub-contract.

#### 3.51 Fair Wages

<u>a)</u>

b)

The Sub-contractor shall in respect of all persons employed anywhere by him in the execution of the Sub-contract, in every factory, workshop or place occupied or used by him for execution of the Sub-contract, observe and fulfill the following conditions:

The Sub-contractor shall pay rates of the wages and observe hours and conditions of labour not less favourable than those established for the trade or industry in the district where work is carried out.

In the absence of any rates of wages, hours or conditions of labour so established the Sub-contractor shall pay rates and observe hours and conditions of labour are not less favourable than the general level of wages, hours and conditions observed by other employers whose general circumstances in the trade or industry in which the Sub-contractor is engaged are similar.

#### 3.52 Supervision

During the progress of the works, the Sub-contractor shall provide and keep constantly available for consultation on site an experienced English - speaking Supervisor and shall provide reasonable office facilities, attendance, etc., for the Supervisor.

In addition, during the whole of the time the works are under construction, the Sub-contractor shall maintain on site one experienced foreman or charge-hand and an adequate number of fitters, etc., for the work covered by the Specification. The number of this staff shall not be reduced without the prior written approval of the Architect or Engineer.

Any instructions given to the Supervisor on site shall be deemed to have

been given to the Sub-contractor. One copy of this Specification and one copy of each of the Contract Drawings (latest issue) must be retained on site at all times, and available for reference by the Engineer or Sub-contractor.

#### 3.53 Test Certificates

The Sub-contractor shall provide the Engineer with three copies of all test reports or certificates that are or may be required by this Specification.

#### 3.54 Labour

The Sub-contractor shall provide skilled and unskilled labour as may be necessary for completion of the contract.

#### 3.55 Discount to the Main Contractor

No discount to the Main Contractor will be included in the tender for this installation.

#### 3.56 Guarantee

The whole of the work will be guaranteed for a period of six months from the date of the Engineer's certification of completion and under such guarantee the Sub-contractor shall remedy at his expense all defects in materials and apparatus due to faulty design, construction or workmanship which may develop in that period.

#### 3.57 <u>Direct Contracts</u>

Notwithstanding the foregoing conditions, the Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C Sum in the Bills of Quantities and to pay for the same direct. In any such instance, profit relative to the P.C Sum in the priced Bills of Quantities will be adjusted as deserved for P.C Sum allowed.

#### 3.58 Attendance upon the Tradesmen etc

The Contractor shall allow for the attendance of trade upon trade and shall afford any this contract every facility for carrying out their work and also for the use of ordinary scaffolding. The contractor however, shall not be required to erect any special scaffolding for them.

#### 3.59 Trade Unions

The contractor shall recognize the freedom of his work people to be members of trade unions.

#### 3.60 Local and other Authorities notices and fees

The contractor shall comply with and give all notices required by aRegulations, Act or by Law of any Local Authority or of any Public Service, Company or Authority who have any jurisdiction with regard to the works or with those systems the same are or will be connected and he shall pay and indemnify the Government against any fees or charges legally demandable under any regulation or by-law in respect of the works; provided that the said fees and charges if not expressly included in the contract sum or stated by way of provisional sum shall be added to the contract sum.

The contractor before making any variation from the contract drawings or specification necessitated by such compliance shall give the Project Manager written notice specifying and giving the reason for such variation and applying for instructions in reference thereto.

If the contractor within seven days of having applied for the same does not receive such instructions, he shall proceed with the works in conforming to the provision regulation or by-law in question and any variation thereby contract.

#### 3.61 Assignment or subletting

The contractor shall not without the written consent of the Project Manager assigns this contract or sublet any portion of the works, provided that such consent shall not be unreasonably withheld to the prejudice of the contractor.

#### 3.62 Partial Completion

If the Government shall take over any part or parts works, apparatus, equipment etc. then within seven days from the date on which the Government shall have taken possession of the relevant part, the Project Manager shall issue a Certificate stating his estimate of the approximate total value of the works which shall be the total value of that part and practical completion of the relevant part shall be deemed to have occurred, and the Defects Liability Period in respect of the relevant part be deemed to have commenced on the date Government shall have taken possession thereof.

The contractor shall make good any defects or other faults in the relevant part that had been deemed complete.

The contractor shall reduce the value of insurance by the full value of the relevant part

The contractor shall be paid for the part of works taken possession by the Government

#### 3.63 Temporary Works

Where temporal works shall be deemed necessary, such as Temporary lighting, the contractor shall take precaution to prevent damage to such works.

The contractor shall include for the cost of and make necessary arrangements with the Project Manager for such temporary works. For temporary lighting, electricity shall be metered and paid for by the contract

#### 3.64 Patent Rights

The contractor shall fully indemnify the Government of Kenya; against any action, claim or proceeding relating to infringement of any patent or design rights, and pay any royalties which may be payable in respect of any article or any part thereof, which shall have been supplied by the contractor to the Project Manager. In like manner the Government of Kenya shall fully indemnify the contractor against any such action, claim or proceedings for infringement under the works, the design thereof of which shall have been supplied by the Project Manager to the contractor, but this indemnify shall apply to the works only, and any permission or request to manufacture to the order of the Project Manager shall not relieve the contractor from liability should he manufacture for supply to other buyers.

#### 3.65 Mobilization and Demobilization

The contractor shall mobilize labour plant and equipment to site according to his programme and schedule of work. He shall ensure optimum presence and utilization of labour, plant and equipment. He should not pay and maintain unnecessary labour force or maintain and service idle plant and equipment. Where necessary he shall demobilize and mobilize the labour, plant and equipment, as he deems fit to ensure optimum progress of the works and this shall be considered to be a continuous process as works progress. He shall make provision for this item in his tender. No claim will be entertained where the contractor has not made any provision for mobilization and demobilization of labour, plant and equipment in the preliminary bills of quantities or elsewhere in this tender.

#### 3.66 Extended Preliminaries

Where it shall be necessary to extend the contract period by the Project manager the contractor shall still ensure availability on site, optimum labour, materials, plant and equipment. The contractor shall make provision for extended preliminaries, should the contract period be extended and this shall be in a form of a percentage of the total Contractor works. Where called upon in the Appendix to these Preliminaries the Contractor shall insert his percentage per month for extended preliminaries that shall form basis for compensation.

Lack of inserting the percentage shall mean that the sub-contractor has provided for this requirement elsewhere in the Bills of Quantities.

#### 3.67 <u>Supervision by Engineer and Site Meetings</u>

A competent Project Engineer appointed by the Engineer as his representative shall supervise the Contract works. The Project Engineer shall be responsible for issuing all the site instructions in any variations

to the works and these shall be delivered through the Contractor with the authority of the Project Manager. Any instructions given verbal shall be confirmed in writing.

The project engineer and (or) the Engineer shall attend management meetings arranged by the Project Manager and for which the Contractor or his representative shall also attend. For the purpose of supervising the project, provisional sums are provided to cover for transport and allowances.

The Contractor shall in his tender allow for the provision of management meetings and site inspections, as instructed by the Engineer, and also profit and attendance on these funds. The funds shall be expended according to Project Manager's instructions to the contractor.

#### 3.68 Amendment to Scope of Contract Works

No amendment to scope of sub-contract works is expected and in case of amendment or modification to scope of work, these shall be communicated to all tenderers in sufficient time before the deadline of the tender submission. However during the contract period and as the works progress the Project Manager may vary the works as per conditions of contract by issuing site instructions.

No claims shall be entertained on account of variation to scope of works either to increase the works (pre-financing) or reduction of works (loss of profit-see clause 1.70)

#### 3.69 <u>Contractor Obligation and Employers Obligation</u>

The sub-contractor will finance all activities as part of his obligation to this contract. The employer shall pay interim payment for materials and work completed on site as his obligation

in this contract, as the works progresses. No claims will be entertained for pre-financing of the project by the sub-contractor, or for loss of profit (expectation loss) in case of prematuretermination, reduction or increase of works as the sub-contractor shall be deemed to have taken adequate measures in programming his works and expenditure and taken necessary financial

precaution while executing the works. No interest shall be payable to the Contractor, except as relates to late payment as in the conditions of contract clause 23.3. The contractor shall where called upon, insert his price to compensate for any of the occurrence stated here

(premature termination, reduction or increase of works), as a percentage of the contract sum in the Appendix to this section.

#### 3.70 APPENDIX TO SUB-CONTRACT PRELIMINARIES AND GENERAL CONDITIONS

#### 1. OMIT TO CLAUSE 3.12

This is not a firm price contract.

#### 2. OMIT TO CLAUSE 3.15

The performance bond shall be 5% of the contract amount and must be from a well established and reputable bank.

#### 3. ADD TO CLAUSE 3.17

Prices quoted shall include 16% VAT. In accordance with Government policy, the 16% VAT and 3% Withholding Tax shall be deducted from all payments made to the subcontractor, and the same shall subsequently be forwarded to the Kenya Revenue Authority (KRA).

#### 4. OMIT TO CLAUSE 3.40

There are no labour camps.

#### 5. ADD TO CLAUSE 3.66

The amount or percentage that may be inserted in the bills of quantities for this item should not exceed the anticipated Liquidated damages amount for the same period.

# SECTION D

GENERAL MECHANICAL SPECIFICATIONS

#### SECTION D

# GENERAL MECHANICAL SPECIFICATION

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#### SECTION D

#### GENERAL MECHANICAL SPECIFICATION

#### 2.01 General

This section specifies the general requirement for plant, equipment and materials forming part of the Sub-contract Works and shall apply except where specifically stated elsewhere in the Specification or on the Contract Drawings.

#### 1. 2.02 Quality of Materials

All plant, equipment and materials supplied as part of the Sub-contract Works shall be new and of first class commercial quality, shall be free from defects and imperfections and where indicated shall be of grades and classifications designated herein.

All products or materials not manufactured by the Sub-contractor shall be products of reputable manufacturers and so far as the provisions of the Specification is concerned shall be as if they had been manufactured by the Sub-contractor.

Materials and apparatus required for the complete installation as called for by the Specification and Contract Drawings shall be supplied by the Subcontractor unless mention is made otherwise.

Materials and apparatus supplied by others for installation and connection by the Sub-contractor shall be carefully examined on receipt. Should any defects be noted, the Sub-contractor shall immediately notify the Engineer.

Defective equipment or that damaged in the course of installation or tests shall be replaced as required to the approval of the Engineer.

#### 2.03 Regulations and Standards

The Sub-contract Works shall comply with the current editions of the following:

- a) The Kenya Government Regulations.
- b) The United Kingdom Institution of Electrical Engineers (IEE) Regulations for the Electrical Equipment of Buildings.
- c) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.
- d) British Standard and Codes of Practice as published by the British Standards Institution (BSI)
- e) The Local Council By-laws.
- e) The Electricity Supply Authority By-laws

- g) Local Authority By-laws.
- h) The Kenya Building Code Regulations.
- i) The Kenya Bureau of Standards

#### 2.04 Electrical Requirements

Plant and equipment supplied under this Sub-contract shall be complete with all necessary motor starters, control boards, and other control apparatus. Where control panels incorporating several starters are supplied they shall be complete with a main isolator.

The supply power up to and including local isolators shall be provided and installed by the Electrical Sub-contractor. All other wiring and connections to equipment shall form part of this Sub-contract and be the responsibility of the Sub-contractor.

The Sub-contractor shall supply three copies of all schematic, cabling and wiring diagrams for the Engineer's approval.

The starting current of all electric motors and equipment shall not exceed the maximum permissible starting currents described in the Kenya Power and Lighting Company (KPLC) By-laws.

All electrical plant and equipment supplied by the Sub-contractor shall be rated for the supply voltage and frequency obtained in Kenya, that is 415 Volts, 50Hz, 3-Phase or 240Volts, 50Hz, 1-phase.

Any equipment that is not rated for the above voltages and frequencies shall be rejected by the Engineer.

#### 2.05 Transport and Storage

All plant and equipment shall, during transportation be suitably packed, crated and protected to minimize the possibility of damage and to prevent corrosion or other deterioration.

On arrival at site all plant and equipment shall be examined and any damage to parts and protective priming coats made good before storage or installation.

Adequate measures shall be taken by the Sub-contractor to ensure that plant and equipment do not suffer any deterioration during storage.

Prior to installation all piping and equipment shall be thoroughly cleaned.

If, in the opinion of the Engineer any equipment has deteriorated or been damaged to such an extent that it is not suitable for installation, the Subcontractor shall replace this equipment at his own cost.

#### 2.06 Site Supervision

The Sub-contractor shall ensure that there is an English-speaking supervisor on the site at all times during normal working hours.

#### 2.07 Installation

Installation of all special plant and equipment shall be carried out by the Subcontractor under adequate supervision from skilled staff provided by the plant and equipment manufacturer or his appointed agent in accordance with the best standards of modern practice and to the relevant regulations and standards described under Clause 2.03 of this Section.

#### 2.08 Testing

#### <u>2.08.1</u> <u>General</u>

The Sub-contractor's attention is drawn to Part 'C' Clause 1.38 of the "Preliminaries and General Conditions".

#### 2.08.2 Material Tests

All material for plant and equipment to be installed under this Sub-contract shall be tested, unless otherwise directed, in accordance with the relevant B.S Specification concerned.

For materials where no B.S. Specification exists, tests are to be made in accordance with the best modern commercial methods to the approval of the Engineer, having regard to the particular type of the materials concerned.

The Sub-contractor shall prepare specimens and performance tests and analyses to demonstrate conformance of the various materials with the applicable standards.

If stock material, which has not been specially manufactured for the plant and equipment specified is used, then the Sub-contractor shall submit satisfactory evidence to the Engineer that such materials conform to the requirements stated herein in which case tests of material may be partially or completely waived.

Certified mill test reports of plates, piping and other materials shall be deemed acceptable.

#### 2.08.3 Manufactured Plant and Equipment – Work Tests

The rights of the Engineer relating to the inspection, examination and testing of plant and equipment during manufacture shall be applicable to the Insurance Companies or Inspection Authorities so nominated by the Engineer.

The Sub-contractor shall give two week's notice to the Engineer of the manufacturer's intention to carry out such tests and inspections.

The Engineer or his representative shall be entitled to witness such tests and inspections. The cost of such tests and inspections shall be borne by the Subcontractor.

Six copies of all test and inspection certificates and performance graphs shall be submitted to the Engineer for his approval as soon as possible after the completion of such tests and inspections.

Plant and equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Sub-contractor's own risk and should the test and inspection certificates not be approved, new tests may be ordered by the Engineer at the Sub-contractor's expense.

#### 2.08.4 Pressure Testing

All pipework installations shall be pressure tested in accordance with the requirements of the various sections of this Specification. The installations may be tested in sections to suit the progress of the works but all tests must be carried out before the work is buried or concealed behind building finishes. All tests must be witnessed by the Engineer or his representative and the Subcontractor shall give 48 hours notice to the Engineer of his intention to carry out such tests.

Any pipework that is buried or concealed before witnessed pressure tests have been carried out shall be exposed at the expense of the Sub-contractor and the specified tests shall then be applied.

The Sub-contractor shall prepare test certificates for signature by the Engineer and shall keep a progressive and up-to-date record of the section of the work that has been tested.

#### 2.09 Colour Coding

Unless stated otherwise in the Particular Specification all pipework shall be colour coded in accordance with the latest edition of B.S 1710 and to the approval of the Engineer or Architect.

#### 2.10 Welding

#### 2.10.1 Preparation

Joints to be made by welding shall be accurately cut to size with edges sheared, flame cut or machined to suit the required type of joint. The prepared surface shall be free from all visible defects such as lamination, surface imperfection due to shearing or flame cutting operation, etc., and shall be free from rust scale, grease and other foreign matter.

#### 2.10.2 Method

All welding shall be carried out by the electric arc processing using covered electrodes in accordance with B.S. 639.

Gas welding may be employed in certain circumstances provided that prior approval is obtained from the Engineer.

#### 2.10.3 Welding Code and Construction

All welded joints shall be carried out in accordance with the following Specifications:

#### <u>a)</u> Pipe Welding

All pipe welds shall be carried out in accordance with the requirements of B.S.806.

#### <u>b)</u> <u>General Welding</u>

All welding of mild steel components other than pipework shall comply with the general requirements of B.S. 1856.

#### 2.10.4 Welders Qualifications

Any welder employed on this Sub-contractor shall have passed the trade tests as laid down by the Government of Kenya.

The Engineer may require to see the appropriate certificate obtained by any welder and should it be proved that the welder does not have the necessary qualifications, the Engineer may instruct the Sub- contractor to replace him by a qualified welder.

# SECTION E

PARTICULAR SPECIFICATIONS FOR INCINERATOR

# SECTION E

# Particular Specifications for Incinerator

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#### PARTICULAR SPECIFICATIONS FOR INCINERATOR

#### 1.0 PARTICULAR CONDITIONS

#### 1.01 LOCATION OF SITE

The site of the proposed sub-contract works shall be situated in Kigumo Sub County.

#### 1.02 GENERAL

The services and equipment described in this specification comprises the supply, delivery, installation, testing and commissioning of an incinerator and the associated accessories including oil installation at Kigumo Sub County.

The tenderer is to ensure that the equipment he proposes to supply is from a reputable manufacturer with full spare back-up and can be serviced and maintained by locally available personnel and is not of such a nature as will require overseas expertise to attend to its maintenance and servicing.

The subcontractor shall include for all items not called for in this specification but which are necessary for the completion, safety and satisfactory functioning of the subcontract works. The installation and components are to comply with all the requirements of the local authority's bye-laws, regulations of water and fire brigade authorities and the latest Kenya Bureau of Standards, British standard specifications and codes of practice or equivalent approved international standards.

The sub-contractor shall be deemed to have visited the site to ascertain the site conditions.

#### 1.03. SCOPE OF SUB-CONTRACT WORKS

The sub-contract works comprise the supply delivery, installation, testing and commissioning of 1No. incinerator, complete with associated accessories including flue and oil installation. The oil installation shall comprise bulk oil storage tank, daily oil tank, transfer hand fuel pump and the associated pipework. The burning capacity of the incinerator shall be 20kg of medical waste per hour.

The incinerator will have a primary and a secondary combustion chamber, temperature indicators, burners, operation and safety controls and a suitable flue (chimney).

#### 1.04 COMMENCEMENT OF WORK

The sub-contractor in submitting his tender shall be deemed to have included for commencing any necessary work on site at such a time as will comply with the main contractor's program.

#### 1.05 CLIMATIC CONDITIONS

The following climatic conditions apply to the site of the sub-contract works and plant, equipment, apparatus and installation shall be suitable for these conditions.

Maximum temperature 27.1°C

Minimum temperature 17 °C

Relative humidity 50%

Altitude 1788 metres above sea level

#### 2.0 THE EQUIPMENT AND PLANT

The incinerator shell and the chimney shall have castable high quality refractory lining, perforated blind for the primary and secondary combustion chambers. The incinerator shall also have the following:-

- ash door
- primary and secondary burners and fans
- temperature indicator devices
- controls
- electrical wiring from the local isolator

The bulk oil storage tank shall have a capacity of 5000 litres and be placed at 0.5m above ground on a firm concrete cradle, complete with the following:-

- drain pipe
- vent pipe
- oil level indicator
- access ladder to the top of the tank
- Coating of the tank with at least 2No. coats of bituminous paint
- manhole cover complete with a gasket
- Any other necessary accessory.

Daily service fuel oil tank, capacity 1800 litres, size  $1220 \times 1220 \times 1220 \text{mm}$  high mounted on a 2.5m high tower, firmly secured on the ground and the steel members to be bolted. The daily oil tank shall have an oil level indicator.

The interconnecting pipe of 50mm diameter between the two tanks shall be class 'C' black mild steel pipe, complete with a 50mm diameter strainer.

The burner fuel supply pipe from the daily tank shall be a 25mm diameter class 'C' black mild steel. The following shall also be supplied:

- 25mm diameter fire vale
- 25mm diameter high capacity strainer
- heating tap along the burner supply pipe, 25mm diameter

The burner supply pipe shall have 25mm thick fibre glass insulation and finished with gauge 22 SWG galvanised steel sheet.

The sub-contractor shall provide all the necessary controls for proper safety and satisfactory working of the installation.

#### 2.01 BURNER

The burner shall be suitable for 35 sec redwood No. 1 scale fuel oil. It shall be robust in construction and be manufactured in cast iron or other suitable materials complete with mounting plates. It must be easily mountable and demountable for ease of cleaning and maintenance. The burner shall have an adequate supply of oil which will readily ignite and burn in a safe manner. Adequate provision shall be provided to prevent any solid matter in the oil, or any matter that may separate out from the oil from damaging any components or chocking of any orifices or valves. The free filtering area should be sufficient to ensure that the filter does not need dismantling for cleaning more often than once a year.

The burner shall have all the necessary controls eg. Solenoid valves, ignition controls, photo electric cell fuel safety controls, low pressure fuel supply cut-off etc.

The burner shall conform to BS 799: part 3 and 6:1981 or any other relevant British Standard.

#### 2.02 CONTROLS

The incinerator shall operate in an automatic manner with all the necessary controls. These controls are to include safety elements such as flame failure unit, pilot lamps, fuses, starters, overload contactors, ON and OFF switches for burners and fans, combustion chamber, temperature indicators for primary and secondary chambers, etc.

Other oil burner control features which are automatic as well shall be as follows:

- i) Electric ignition switch 'ON' before the oil is supplied
- ii) Delayed return to re-start position to allow purging
- iii) Re-start after temporary electric supply failure
- iv) Positive safety lock-out in case of flame failure from whatever cause.
- v) Red signal light on control panel to indicate safety lock-out
- vi) Photo electric protective cell as flame failure device.

The controls shall be mounted on suitable panel to be installed in a position easy to read and control from the charging door side of the incinerator.

The control panel shall be fabricated from anodized, 18 SWG, mild steel sheet.

#### 2.03 FLUE (CHIMNEY)

The flue, 15000mm long and 550mm diameter shall be constructed from steel sheet, complete with lagging, damper and rain water protection cone. The chimney shall be linned with castable grade diatomaceaous concrete, mixed with high alumina cement in accordance with BS 4076: 1989.

The damper will control the closing of the door to not less than 85%. The stack is to allow fresh air at the stack's base so that the flue gases are discharged at not more than 400°C and that the discharge conforms to the British Clean Air Act.

#### 2.04 POWER SUPPLY

The sub-contractor shall supply equipment which are suitable for running on a 415V, 3 phase, 50HZ or 240V, single phase, 50HZ electric power supply.

#### 2.05 OIL STORAGE AND SUPPLY

The system shall consist of a bulk oil storage tank, daily tank, transfer hand fuel pump and associated pipe work. Oil from the bulk storage tank will be delivered to a high level daily tank situated in the incinerator room by use of a transfer hand pump.

#### 2.06 SPARES AND MANUALS

The tenderer is to submit with his tender a list of recommended initial stock of spares together with their prices. Apart from the burner spares mentioned herebelow, the spares' prices are not to be included in the main summary of prices schedule but are to be separate and are meant to be ordered later if and when it becomes necessary and convenient to the client. The burner spares whose prices are to be included in the main summary of prices schedule (BQ) is:-

- i) 1No. Set of safety controls
- ii) 1No. Solenoid value
- iii) 1No. Oil ignition system
- iv) 2No. Photo-electric cells

Two sets of operating and maintenance manuals (both for the incinerator and burners) must also be supplied.

#### 2.07 INCINERATOR TESTING AND COMMISSIONING

The sub-contractor shall test and commission the incinerator in the presence of the Engineer and verify that the incinerator is functioning according to the specifications laid here-in and in the catalogues and manuals from the suppliers of the incinerator.

#### 2.08 BULK OIL STORAGE TANK

The bulk oil storage tank, nominal capacity of 5000 litres and complying with BS 799 part 5: 1975 shall be positioned on two concrete cradles.

The works shall include supply, delivery, assembling, erection, testing, commissioning and setting to work. The tank is to be of welded mild steel type with a design pressure of  $40 \text{kN/m}^2$  and a storage temperature of  $24^{\circ}\text{C}$ . It is to be located adjacent to the incinerator.

The tank shall be cylindrical with dished end and be constructed of 6mm thick block mild steel plates in accordance with BS 1966 No. 1 quality. Galvanised materials shall not be used. Welded construction parts shall be sprayed.

The tank shall be pressure tested with a total head of water, or equivalent, measured from the base of the tank, and equal to 1½ times the sum of:

- (i) The height of the tank, and
- (ii) The design head above the top of the tank that is 3.5m of water.

The pressure shall be raised slowly and steadily until the specified test pressure is reached and that pressure shall be maintained for a period long enough to permit a thorough examination to be made to ensure that the tank is sound enough and shows no leaks or undue distortion. Welded joints shall be radiographed and a certificate issued. Should any defects be found, they shall be made good and the test procedure repeated until the tank is certified to be sound. The tests shall be carried out in the presence of the Engineer and subsequently, the sub-contractor will provide the Engineer with the test certificate.

The tank shall then be cleaned externally and provided with rust inhibiting primer before applying 2No. Coats of bituminous paint. The inside shall also be cleaned and purged of any foreign matter before setting to work.

Ladders and platforms shall be thoroughly cleaned and freed from rust and scale and painted with a priming coat of approved paint.

The tank shall be provided with the following:-

- (i) 450mm bolted inspection cover with a liquid and vapour-tight joint made with a liquid and vapour tight joint made with a gasket of fuel resistant materials.
- (ii) 75mm (3") vent socket screwed B-SP and pipe at the higher end of the tank with an unloading device to prevent the rise in tank pressure above the design pressure. The vent pipe shall be free from bends and shall have a continuous rise while being as short as convenient. It shall terminate in open air in a position where it cannot be tampered with. The open end shall be turned down and fitted with an open mesh wire cage.
- (iii) 65mm diameter filling pipe with hose coupling connection
- (iv) 50mm diameter gauging connection with lockable cap.
- (v) 50mm diameter supply pipe
- (vi) 25mm diameter water drain-off valve

The sub-contractor shall supply hydrostatic oil contents gauge (level indicator) or a properly calibrated stick (of dip tape) and access ladder to the top of the tank. The filling pipe shall be extended inside the tank to within 150mm of tank bottom, complete with anti-siphoning device.

The following information shall be permanently and clearly marked on the tank on the centre line near the outlet connection.

- · Gross capacity in litres
- Test pressure
- Date of test
- Maximum allowable working pressure
- Manufacturer's name of trade mark
- Year of manufacture
- The number of British Standard and type of tank

The tank shall be installed with a 25mm fall towards the water drain-off tapping point. The supply socket shall be extended inside the tank to prevent ingress of water in the supply line. The main contractor shall construct tank supports and bund walls according to detail drawings produced by the sub-contractor. A valved drain-off from the lowest part of the tank shall be provided complete with tail pipe and a provision for hose connection.

#### 2.09 TRANSFER HAND PUMP

A semi rotary hand pump No. 6 shall be provided for filling the storage tank from the oil tanker. It shall be installed complete with all the necessary plumbing, fittings and accessories.

#### 2.10 DAILY SERVICE TANK

A daily storage tank, nominal capacity, 1800L, shall be mounted at 2.5 metre high level in the incinerator room. Tank shall be manufactured from 14 SWG, black mild steel sheet, complete with bolted cover and adequate venting. The tank shall conform to BS 799: part 5: 1995 and be provided with a contents sight tube.

The tank shall be tested for any leaks of which if any is detected will be made good before the tank is painted externally with rust inhibiting paint.

Tank to be securely bolted.

#### 2.11 AUXILIARY EQUIPMENT

All pipework used in the oil storage systems shall be to B.S. 1387 heavy grade. Joints shall be screwed, and sufficient unions must be provided to allow easy dismantling of the equipment.

A 25mm diameter fire valve of the quick action lever operated dead weight type shall be installed, in the oil flow line. This shall be held in the open position by a light gauge steel cable attached to a fusible link. The fusible link shall be mounted directly over the burner. The 25mm burner oil feed pipe from the high level daily tank shall be heated by an electric tracing tape properly wrapped around the pipe. The pipe shall then be insulated with 25mm thick fibre glass insulation and finished with gauge 22swg galvanized steel sheet.

The supply pipe from the bulk oil storage tank to the high level daily tank has been installed by others but the sub-contractor shall allow for connection to the high level daily tank. The sub-contractor shall also supply and install high capacity strainers along the supply pipe and the burner feed pipe.

#### 2.12 PIPE SUPPORTS

The variety and type of supports shall be kept to a minimum and their design shall be such as to facilitate guide and secure fixing to match concrete masonry or wood. Consideration shall be given when designing supports to the maintenance of desired pipe fall and the restraining of pipe movements to a longitudinal axial direction only. The sub-contractor shall supply and install all steel work forming part of pipe support assemblies and shall be responsible for making good any damage to builders work associated with builders work installation.

Pipe runs shall be secured by clips connected to pipe hangers, wall brackets or trapeze type supports. 'U' bolts shall not be used for clips without prior approval of the Engineer.

The sub-contractor shall submit all his proposals for the pipe supports to the Engineer for approval before any erection work commences.

#### 2.13 ELECTRICAL WORKS

All wiring between items, plant and controls shall be under the sub-contractor. The sub-contractor shall provide adequate supervision to ensure that electrical connections are correctly made to all items of equipment and controls supplied by him under the terms of the sub-contract agreement.

2.14 TESTING AND COMMISSIONING (WHOLE INSTALLATION)

The sub-contractor shall supply sufficient fuel to test and commission the entire installation to the Engineer's and DR's satisfaction. The sub-contractor shall also provide sufficient waste to last at least two (2) hours. The incinerator performance test shall then be carried out in accordance to BS3316: part 4:1987. Should any defect be detected, it shall be rectified and the testing process repeated to the Engineer's satisfaction.

SECTION F BILLS

OF QUANTITIES AND

SCHEDULE OF PRICES

## SECTION F

#### SCHEDULE OF PRICES & BILLS OF QUANTITIES

#### **GENERAL NOTE TO TENDERERS**

- 1. The total of the prices in the summary of the prices shall include for the whole of the sub-contract works in accordance with the specification as defined before and shall be carried forward to the form of tender.
- 2. Any prices omitted from any item, section or part of the price schedule shall be deemed to have been included in another item, section or part.
- 3. The prices shall include for all obligations under the sub-contract including and not limited to:
  - a) Supply of any materials, equipment, apparatus, fittings, spares and tools
  - b) Shipping if required
  - c) Insurance
  - d) Clearing and forwarding
  - e) Delivery, handling and storage at site
  - f) Packing for storage
  - g) Replace any defective or damaged item
  - h) Installation
  - i) Testing
  - j) Painting
  - k) Commissioning
  - 1) Maintenance during the defects liability period.
- 4. The unit rates shall include import duty and 14% VAT where applicable, and shall be expressed in Kenya Shillings. In accordance with Government Policy, the 14% VAT shall be deducted from all payments made in favour of the tenderer, and the same shall be forwarded to the Kenya Revenue Authority (KRA).
- 5. Any tenderer whose firm uses the title "Engineer" or "Engineering" must provide evidence of at least one of the directors by 'Engineers Registration Board' of Kenya to avoid disqualification.

## STATEMENT OF COMPLIANCE

- a) I confirm compliance of all clauses of the General Preliminaries, General Specification and Particular Specifications in this tender.
- b) I confirm I have not made and will not make any payment to any person, which can be perceived as an inducement to win this tender.

Signed	for and on behalf of the tenderer.
Date	
Official Rubber Stamp	

#### BILL No. 1

#### A) PRICING OF PRELIMINARIES ITEMS.

Prices will be inserted against item of preliminaries in the sub-contractor's Bills of Quantities and specification. These Bills are designated as Bill 1 in this Section. Where the sub-contractor fails to insert his price in any item he shall be deemed to have made adequate provision for this on various items in the Bills of Quantities. The preliminaries form part of this contract and together with other Bills of Quantities covers for the costs involved in complying with all the requirements for the proper execution of the whole of the works in the contract.

The Bills of Quantities are divided generally into three sections:-

#### (a) Preliminaries – Bill 1

Sub-contractors preliminaries are as per those described in section C – sub-contractor preliminaries and conditions of contractor. The sub-contractor shall study the conditions and make provision to cover their cost in this Bill. The numbers of preliminary items to be priced by the Tenderer have been limited to tangible items such as site office, temporary works and others. However the Tenderer is free to include and price any other items he deems necessary taking into consideration conditions he is likely to encounter on site.

#### (b) <u>Installation Items – Other Bills</u>

- i) The brief description of the items in these Bills of Quantities should in no way modify or supersede the detailed descriptions in the contract Drawings, conditions of contract and specifications.
- ii) The unit of measurements and observations are as per those described in clause 3.05 of the section C.

#### (c) Summary

The summary contains tabulation of the separate parts of the Bills of Quantities carried forward with provisional sum, contingencies and any prime cost sums included. The sub-contract shall insert his totals and enter his grand total tender sum in the space provided below the summary.

This grand total tender sum shall be entered in the Form of Tender provided elsewhere in

This grand total tender sum shall be entered in the Form of Tender\_provided elsewhere in this document

**BILL NO. 1 - SUB-CONTRACT PRELIMINARIES** 

	LL NO. 1 - SUB-CONTRACT PRELIMINARIES		
ITEM	DESCRIPTION	KSHS	CTS
1	Discrepancies clause 3.02		
2	Conditions of Sub-Contract Agreement clause 3.03		
3	Payments clause3.04		
4	Site location clause 3.06		
5	Scope of Contract Works clause 3.08		
6	Extent of the Contractor's Duties clause 3.09		
7	Firm price contract clause 3.12		
8	Variation clause 3.13		
9	Prime cost and provisional sum clause 3.14 (insert profit and attendance which is a percentage of expended PC or provisional sum.)		
10	Bond clause 3.15		
11	Government Legislation and Regulations clause 3.16		
12	Import Duty and Value Added Tax clause 3.17(Note this clause applies for materials supplied only. VAT will also be paid by the sub-contractor as allowed in the summary page)		
13	Insurance company Fees clause 3.18		
14	Provision of services by the Main contractor clause 3.19		
15	Samples and Materials Generally clause 3.21		
	Sub-Total Carried To Next Page F- 5		

ITEM	DESCRIPTION	KSHS	CTS
		KSHS	CIS
Sub- tot	al Carried from Page F4		
16	Supplies clause 3.20		
17	Bills of Quantities clause 3.23		
18	Contractor's Office in Kenya clause 3.24		
19	Builder's Work clause 3.25		
20	Setting to work and Regulating system clause 3.29		
21	Identification of plant components clause 3.30		
22	Working Drawings clause 3.32 (must price for this clause)		
23	Record Drawings(As Installed) and Instructions clause 3.33 (must price for this clause)		
24	Maintenance Manual clause 3.34 (must price for this clause)		
25	Hand over clause 3.35		
26	Painting clause 3.36		
27	Testing and Inspection – manufactured plant clause 3.38		
28	Testing and Inspection – Installation clause 3.39		
29	Storage of Materials clause 3.41		
30	Initial Maintenance clause 3.42		
31	Water and Electricity for the works clause 3.45		
32	Protection clause 3.46		
Sub-Tot	ral Carried To Next Page F- 6		

ITEM	DESCRIPTION	KSHS	CTS
Sub-Tota	al Carried from F-5		
33	Defects after completion clause 3.47		
34	Damages for delay clause 3.48		
35	Clear away on completion clause 3.49		
36	Final account clause 3.50		
37	Fair wages clause 3.51		
38	Supervision clause 3.52		
39	Direct contracts clause 3.57		
40	Attendance Upon Tradesmen, etc. (Insert percentage only) clause 3.58		
	Local and other Authorities notices and fees clause 3.60		
41	Temporary Works clause 3.63		
42	Patent Rights clause 3.64		
43	Mobilization and Demobilization Clause 3.65		
44	Extended Preliminaries Clause 3.66		
45	Supervision by Engineer and Site Meetings Clause 3.67	150,000	00
46	Allow for profit and Attendance for the above		
47	Amendment to Scope of Sub-Contract Works		
48	Clause 3.68		
49	Contractor's Obligation and Employer's Obligation clause 3.69(see appendix also)		
	Any other preliminaries.		
50			
Sub-Tota	al Carried To Collection Page F-10		
	~		

	BILL NO.2:INCINERATOR INSTALLATION					
ITEM		QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)	
А	Supply, deliver, install and test 20kg/hr hospital waste incinerator as a complete packaged unit. The incinerator to be complete with 2No. Burners (ignition and after burners) capable of burning 20kg of mixed hospital waste per hour, FD fan, air receiver, air ductwork unit with its dampers, pressure and temperature gauges, sight glass with fibre glass gaskets and control panel (fully) wired. The incinerator should have two chambers (hearth and after chamber) with upper chamber capable of burning flue waste from lower chamber and eliminating hazardous emissions completely.	1	Item			
В	Self supporting chimney (flue) to be mounted on the incinerator of a length of 15m and a diameter corresponding to the diameter of the incinerator's waste gases outlet but approximately 600mm. The whole chimney to be insulated and it will be mounted on a concrete base constructed by others but as per sub-contactor's instructions.	1	Item			
С	Daily service fuel oil tank, capacity 1800 litres, size 1220 x 1220 x 1220mm high mounted on a 2.5m high tower. The tank to be complete with access manhole, washout, overflow pipe, access ladder, outlet connections and gate valves.  2.5m high steel tower to support the daily service	1	Item			
D	fuel oil tank and steel ladder, all to be approved.	1	Item			
E	All Associated interconnecting pipe work between the fuel oil storage tank and the bulk fuel oil service tank, which shall be 50mm diameter black mild steel pipe class 'C' about 30 metres long.		Lm			
F	Initial filling of the day oil storage tank with class D oil for fire testing and commissioning of the burners.  Semi-rotary hand transfer pump capable of	1000	Litres			
G	transferring oil from drums to day oil service tank.	1	No.			
Н	Horizontal Bulk oil storage Tank for the Incenerator each of capacity 5,000litres with all vents manholes and connections mounted and strapped by tank supplier on baerers in a bunded area built by others tank as maufactured by warren or approved equivalent.	1	Item			
	Total amount carried to Price Collection Page for	or Incin	erator			

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)	
	DIDE WORK					
	PIPE WORK					
Α	65mm diameter pipe	30	LM			
В	50mm diameter pipe	60	LM			
	ooniin damotor pipo	00				
С	50mm diameter gate valves with associated unions	6	No			
D	50mm diameter strainer	1	No.			
Е	65mm diameter non-return	2	No.			
F	50mm diameter bends	10	No.			
G	50mm diametertee	2	No.			
Н	50mm diameter inlet valve from trailer	1	No.			
l ;;	25mm diameter tee	2	No.			
j	25mm diameter bend	4	No.			
K	25mm diameter gate valve with associated unions	2	No.			
I.	-	2	INO.			
L	Stainless steel sump pump capable of 13m³/hr at 5m head as Grundfos centrifugal submersible waste water pump directly coupled to a 0.6kW single phase motor	1	No.			
М	Control panel, arranged to DOL start and incorporates an isolator, thermal overload magnetic overload protection, on/off/trip indicator lights, auto/manual hand selector switch and contactors, ammeter and phase failure relay, all in steel	1	Item			
N	enclosure with terminals.  Testing and commissioning of the whole installations to the satisfaction of the Engineer.  Sumfor as built drawings and manuals – 2 sets each	1	Item			
0	for incinerator. The drawing shall be in hardcopy (scale 1:25, 1:50) and in soft copy. The soft copy shall be in 700mb compact disc (cd) and another	1	Item			
Р	copy in 1GB flash disk. InitialfillofbulkoilstoragetankwithclassDoil 5000 litres	5000	litres			
	Total amount carried to Price Collection Page for Incinerator pipework					

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)	
А	FIRE-FIGHTING EQUIPMENT 4.5kg dry CO <sub>2</sub> gas portable fire extinguishers complete with squeeze grip operating head, and discharge nozzle, fully charged.	1	No			
В	9litres chemical powder fire extinguisher complete with squeeze grip operating head, and discharge nozzle, fully charged.	1	No			
С	125mm manual alarm bell	1	No			
D	Fire instruction notice/sign for the incinerator house as indicated in the particular specifications	1	No			
	PROJECT MANA GER'SSTATIONERY, The tenderer shall price for the following requirements. These shall then be delivered, upon their first demand to the office of the Chief Engineer Mechanical (BS) immediately after the award to the successful bidder					
Е	Lenovo Yoga 520 X360 14" Core i7-7500U 8gb/ 1Tb Laptop	1	No.			
F	Ream white photocopying paper A/4 80g/m2	10	Ream			
G H	Letterhead quality paper, size A4, 80g/cm <sup>3</sup> , Green, 500 sheets EPSON WF-7620 Printer	5 1	Ream No.			
11		ı	INO.			
	Total amount carried to Price Collection Page for Fire fighting equipment					

	COLLECTION PAGE FOR INCINERATOR			
ITEM	DESCRIPTION			AMOUNT
				(KSHS)
Α	Bill No.1: Contract Preliminaries B/F			
В	Total for Incinerator brought forward			
С	Total for Incinerator Pipework brought forward			
D	Total for Incinerator Fire fighting equipment brought forward.			
Е	Contingency Sum			600,000.00
	Total for Incinerator Carried to FORM OF TEND	ER		

### SCHEDULE OF UNIT RATES

ITEM	DESCRIPTION	QTY	UNIT	RATE
A	Incinerator complete with 2No. Burners (ignition and after burners), control panel (fully wired) capable of burning 50 kg of mixed waste per hour.	1	No	
В	Ditto but 75kg/hr.			
С	Daily service fuel oil tank, capacity 1000 liters mounted on a 2.5m high stand.	1	No	
D	Bulk fuel oil storage tank capacity 2,000 liters, complete with a transfer hand pump.	1	No	

# SECTION G

# TECHNICAL SCHEDULE

## TECHNICAL SCHEDULE

#### TECHNICAL SCHEDULES

- a) The tender shall submit technical schedules for all materials and equipment upon which he has based his tender sum.
- b) The tenderer shall also submit separate comprehensive descriptive and performance details for all plant apparatus and fittings, as described in the technical schedule.
- c) Completion of the technical schedules shall not relieve the contractor from complying with the requirements of the specification except as may be approved by the Engineer.

## TECHNICAL SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	COUNTRY OF ORIGIN	PARTICULARS
1.	Incinerator		OF ORIGIN	
2.	Burners			
3.	Hand pump			
4.	Flue stack			
5.	Bulk oil storage tank			

# SECTION H SCHEDULE OF DRAWINGS

## SCHEDULE OF DRAWINGS

As shall be issued by the Engineer during project implementation	
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# **SECTION I:**

## **STANDARD FORMS**

NOTE: All these forms MUST be filled, stamped and dated where necessary as they form a basis of evaluation of the tender

# **STANDARD FORMS**

## **CONTENTS**

<u>FORM</u>	<u>M</u> PAG	<u>E</u>
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3.	CONFIDENTIAL BUSINESS QUESTIONNAIRECB	1/2 - CB2/2
4.	KEY PERSONNEL	KP 1/1
5.	CONTRACTS COMPLETED IN THE LAST FIVE (5) YEARS.	. SP 1/1
6.	SCHEDULE OF ON-GOING PROJECTS	CW 1/1
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8	EVIDENCE OF FINANCIAL RESOURCES	I-9
9	NAME OF THE BANKERS	I-10
10	DETAILS OF LITIGATIONS OR ARBITRATION PROCEEDING	IGSI-11
11	SCHEDULE OF MAJOR ITEMS OF CONTRACTOR'S EQUIP PROPOSED FOR CARRYING OUT THE WORKS	

## **PERFORMANCE BANK GUARANTEE**

То:	The Principal Secretary, Ministry of Health, P.O. Box 30016-00100 NAIROBI
Dear	Sir,
under	REAS(Hereinafter called "the Contractor") has taken, in pursuance of Contract No
furnis	WHEREAS it has been stipulated by you in the said Contract that the Contractor shall h you with a Bank Guarantee by a recognized bank for the sum specified therein as ity for compliance with his obligations in accordance with the Contract;
AND '	WHEREAS we have agreed to give the Contractor such a Bank Guarantee:
behal Kshs.	THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on f of the Contractor, up to a total of:
And w	
afores	
	ereby waive the necessity of your demanding the said debt from the Contractor before inting us with the demand.
the W made	orther agree that no change, addition or other modification of the terms of the Contract or of forks to be performed there under or of any of the Contract documents which may be between you and the Contractor shall in any way release us from any liability under this pantee, and we hereby waive notice of any change, addition, or modification.
This g	guarantee shall be valid until the date of issue of the Certificate of Completion.
	SIGNATURE AND SEAL OF THE GUARANTOR

**PG1/1** 

## **TENDER QUESTIONNAIRE**

Please fill in block letters.

1.	Full names of Tenderer:
2.	Full address of Tenderer to which tender correspondence is to be sent (unless an agent has been appointed below):
3.	Telephone number (s) of Tenderer:
4.	Telex/Fax Address of Tenderer:
5.	Name of Tenderer's representative to be contacted on matters of the tender during the tender period:
6.	Details of Tenderer's nominated agent (if any) to receive tender notices. This is essential if the Tenderer does not have his registered address in Kenya (name, address telephone, telex):
	Signature of Tenderer

## **CONFIDENTIAL BUSINESS QUESTIONNAIRE**

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

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

Part	1 – General					
	ness Name					
Loca	tion of business premise	es:				
Cour	ntry/Town					
Plot I	No			Street/Road		
Posta	al Address			Tel No		
Natu	re of Business					
Curre	ent Trade Licence No…			Expiring date		
Maxi	mum value of business	which you can	handle	at any time:		
Keny	a Shillings					
Nam	e of your bankers					
Bran	ch					
Part	2 (a) – Sole Proprietor	•				
	name in full					
•						
Natio	nality			Country of 0	Origin	
Citize	enship details					
Part	2 (b) – Partnership					
Give	details of partners as fo	ollows:				
	Name in full	Nationality	0:::	nabin Dataila	Oh.	
	Name in full	•		nship Details	Sha	
1.						
2.						
3.						
4.						

Part 2	R(c) – Registered Com	pany		
Private	e or Public			
State	the nominal and issued	d capita of the compa	ny:	
Nomir	nal KShs			
Issued	d KShs			
Give o	details of all directors a			
	Name in full	Nationality	Citizenship Details*	Shares
1.				
2.				
3.		•••••		
4.				
Part 2	?(d) Interest in the Fire	m:		
	e any person/persons firm? Yes/No (De		the Government of Kenya	a <b>WHO</b> has interest
111 11113	111111: 1 e 3/110 (D	elete as fiecessaly)		
l certif	y that the above inform	nation is correct		
	y mat me above mom			
	Title	Signa	ature	Date
		2.9		

<sup>\*</sup> Attach proof of citizenship

## **KEY PERSONNEL**

Qualifications and experience of key personnel proposed for administration and execution of the Contract.

Bidders MUST attach certificates and C.Vs of those listed.

POSITION	NAME	YEARS OF EXPERIENCE (GENERAL)	YEARS OF EXPERIENCE IN PROPOSED POSITION
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

	Title	Signature	Dat	e			
I certify that the above information is correct.							
	10.			İ			

SCHEDULE OF ON-GOING PROJECTS

Details of on-going or completed projects, including expected completion date.

Bidders MUST attach copies of award letters or any other evidence of having been awarded the projects listed.

PROJECT <b>NAME</b>	NAME OF CLIENT	CONTRACT SUM	%COMPLETE	COMPLET ION DATE

I certify that the above works are currently being carried out by ourselves.							
Title	SP1	Signature /1		Date			

## **CONTRACTS COMPLETED IN THE LAST FIVE (5) YEARS**

Work performed on works of a similar nature and volume over the last five years. Bidders MUST attach completion certificates or any other evidence of having executed the listed works to completion.

PROJECT NAME	NAME OF CLIENT	TYPE OF WORK AND YEAR OF COMPLETION	VALUE OF CONTRACT (KShs.)	
I certify that the above works were successfully carried out and completed by ourselves.				

rectary that the above from	more educationary carried edit and con-	יים ויים מיים ויים מיים ויים ויים ויים ו
Title	Signature	Date

#### FINANCIAL REPORTS FOR THE LAST FIVE YEAR

(Balance sheets, Profits and Loss Statements, Auditor's reports, etc. List below and attach copies)

•	
	_
	_
	_

# EVIDENCE OF FINANCIAL RESOURCES TO MEET QUALIFICATION REQUIREMENTS (Cash in Hand, Lines of credit, e.t.c. List below and attach copies of supportive documents.)

•		
•		
•		
		•
•		
•		
•		
•		

# NAME, ADDRESS AND TELEPHONE, TELEX AND FACSIMILE OF BANKS (This should be for banks that may provide reference if contacted by the employer)

NAME	ADDRESS	TELEPHONE	TELEX	FACSIMILE

# DETAILS OF LITIGATIONS OR ARBITRATION PROCEEDINGS IN WHICH THE TENDERER IS INVOLVED AS ONE OF THE PARTIES

•		
•		
•		
_		
•		
•		
•		
•		

# SCHEDULE OF MAJOR ITEMS OF CONTRACTOR'S EQUIPMENT PROPOSED FOR CARRYING OUT THE WORKS

ITEM OF EQUIPMENT	DESCRIPTION, MAKE AND AGE (Years)	CONDITION (New, good, poor) and number available	OWNED, LEASED (From whom?), or to be purchased (From whom?)