

REPUBLIC OF KENYA MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT

STATE DEPARTMENT OF PUBLIC WORKS

PROPOSED CONSTRUCTION OF INDIVIDUAL TRAINING KITCHEN AT KENYA UTALII COLLEGE ALONG THIKA ROAD - NAIROBI.

W.P. ITEM NO. D117 / NB / NB / 1802 - JOB NO. 10489 A

SPECIFICATIONS AND BILLS OF QUANTITIES

FOR

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING

OF

INTERNAL PLUMBING AND DRAINAGE, WATER RETICULATION AND FIRE PROTECTION INSTALLATION WORKS

CHIEF ARCHITECT

MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT P.O.BOX 30743-00100 NAIROBI.

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MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT P.O.BOX 30743-00100 NAIROBI.

CHIEF ENGINEER (STRUCTURAL)

MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT P.O.BOX 30743-00100 NAIROBI.

April, 2019

CHIEF ENGINEER (ELECTRICAL)

MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT P.O.BOX 41191-00100 NAIROBI.

CHIEF ENGINEER [MECHANICAL(BS)]

MINISTRY OF TRANSPORT, INFRASTRUCTURE, PUBLIC WORKS, HOUSING AND URBAN DEVELOPMENT P.O.BOX 41191-00100 NAIROBI.

CLIENT

The Principal/ CEO Kenya Utalii College P.O. BOX 31050-00600 NAIROBI

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DEFINITIONS

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

The Employer: Government of the Republic of Kenya

Represented by: The Principal / CEO

Kenya Utalii College P.O. Box 31052-00600

NAIROBI

Project Manager: Chief Architect

Ministry of Transport, Infrastructure, Public Works, Housing and

Urban Development P.O. Box 30743-00100

NAIROBI

Architect: Chief Architect

Ministry of Transport, Infrastructure, Public Works, Housing and

Urban Development P.O. Box 30743-00100

NAIROBI

Engineer: Chief Engineer [Mechanical (BS)]

Ministry of Transport, Infrastructure, Public Works, Housing and

Urban Development P.O. Box 41191 - 00100

NAIROBI

Electrical Engineer: Chief Engineer (Electrical)

Ministry of Transport, Infrastructure, Public Works, Housing and

Urban Development P.O. Box 41191 - 00100

NAIROBI

Quantity Surveyor: Chief Quantity Surveyor

Ministry of Transport, Infrastructure, Public Works, Housing and

Urban Development P.O. Box 30743-00100

NAIROBI

Structural Engineer: Chief Engineer (Structural)

Ministry of Transport, Infrastructure, Public Works, Housing and

Urban Development P.O. Box 30743-00100

NAIROBI

Main Contractor: The firm appointed to carry out the supply, delivery, installation,

testing and commissioning of liquefied petroleum gas installation

works

Site: Kenya Utalii College Along Thika Road in Nairobi.

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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 Engineer [Mechanical (BS)], Ministry of Transport, Infrastructure, Public Works, Housing and Urban Development.
- 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 Engineer [Mechanical (BS)], Ministry of Transport, Infrastructure, Public Works, Housing and Urban Development, 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 Board of Kenya to avoid disqualification.

FORM OF TENDER

To: The Principal / CEO Kenya Utalii College P.O. Box 31052 - 00600 NAIROBI

Dear Sir,

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF INTERNAL PLUMBING AND DRAINAGE, WATER RETICULATION AND FIRE D Ι

PR CC	ROTECTION INSTALLATION WORKS FOR THE PROPOSED ONSTRUCTION OF INDIVIDUAL TRAINING KITCHEN AT KENYA UTALII OLLEGE ALONG THIKA ROAD IN NAIROBI.
1.	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 of:
	Kshs[Amount in figures]
	Kenya Shillings
2.	We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Employer's Representative's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.
3.	We agree to abide by this tender for a period of 120 days from the date of tender opening and shall remain binding upon us and may be accepted at any time before that date.
4.	Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.
5.	Understand that you are not bound to accept the lowest or any tender you may receive.
	Dated this
	PIN No
	VAT CERTIFICATE No.
	Witness: Name
	Signature
	(iv)

FORM OF TENDER SECURITY FROM BANK

WHEREAS	the supply, delivery, installation, testing age, water reticulation and fire protection
KNOW ALL PEOPLE by these presents that WE Having our registered office at	shsaid Employer, the Bank binds itself, its the Common Seal of the said Bank this
·	20
THE CONDITIONS of this obligation are: 1. If after tender opening the Tenderer with tender validity specified in the instruction or	ithdraws his tender during the period of as to Tenderers
	of the acceptance of his tender by the idity:
(a) fails or refuses to execute the form Instructions to Tenderers, if required;	n of Agreement in accordance with the or
(b) fails or refuses to furnish the Performant Instructions to Tenderers;	rmance Security, in accordance with the
We undertake to pay to the Employer up to the above demand, without the Employer having to substant demand the Employer will note that the amount classification occurrence of one or both of the two conditions conditions.	ntiate his demand, provided that in his aimed by his is due to him, owing to the
This guarantee will remain in force for a period of and any demand in respect thereof should reach the	
(Date)	(Signature of the Bank)
(Witness)	(Seal)

FORM OF TENDER SECURITY FROM INSURANCE

submitted and com installatio	d his tender dated missioning of internal plumbing and dr	(hereinafter called "the Tenderer") has for the supply, delivery, installation, testing rainage, water reticulation and fire protection individual training kitchen at Kenya Utalii
KNOW A	ALL PEOPLE by these presents that WE	<u> </u>
	our registered office at	
(hereinaf	ter called "the Insurance"), are bound un	ito
(hereinaf	ter called "the Employer") in the sum of	Kshs
for which	n payment, well and truly to be made to	the said Employer, the Insurance binds itself,
	ssors and assigns by these presents seale	
Insurance	e thisDay of	20
THE CO	NDITIONS of this obligation are:	
3.	U	withdraws his tender during the period of
3.	tender validity specified in the instruc	
	Or	tions to Tenderers
4.		ed of the acceptance of his tender by the
	Employer during the period of tender	•
	(a) fails or refuses to execute the f Instructions to Tenderers, if requir	form of Agreement in accordance with the red; or
	(b) fails or refuses to furnish the Pe Instructions to Tenderers;	rformance Security, in accordance with the
demand, demand	without the Employer having to sub the Employer will note that the amount ce of one or both of the two condit	bove amount upon receipt of his first written stantiate his demand, provided that in his claimed by his is due to him, owing to the ions, specifying the occurred condition or
· ·	•	of 150 days from the date of tender opening, he Insurance not later than the said date.
	(Date)	(Signature of the Insurance)
	(Witness)	(Sagl)
	(Witness)	(Seal)

SECTION A:

INSTRUCTIONS TO TENDERERS

INSTRUCTIONS TO TENDERERS

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INSTRUCTIONS 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 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.

- (d) 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.
- (e) A draft Program of Works in the form of a bar chart and Schedule of Payment which shall form part of the Contract if the tender is accepted. Any change in the Program or Schedule shall be subjected to the approval of the Engineer.
- (f) Details of any current litigation or arbitration proceedings in which the Tenderer is involved as one of the parties.

2.3 Joint Ventures

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

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

3. Cost of Tendering

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. Site Visit

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 Tenderers
 - 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. Clarification of Tender Documents

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 s/he 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. Language of Tender

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. Tender Prices

- 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 initialled by the person or persons signing the tender.
- 10.2 A price or rate shall be inserted by the tenderer for every item in the Bills of Quantities whether the quantities are stated or not items against which no rate or price is entered by the tenderer will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities.

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 is 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 per cent) 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.
- 11.4 Tenderers must enclose with their tenders, a brief justification of the foreign currency requirements stated in their tenders.

12. Tender Validity

- 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. Tender Surety

- 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, 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. No Alternative Offers

- 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. Pre-Tender Meeting

- 15.1 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".
- 16.2 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 initialled 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 initialled by the person of persons signing the tender.

SUBMISSION OF TENDERS

17. Sealing and Marking of Tenders

- 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.

19 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 Tender Opening

- 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 Process to be Confidential

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

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 Day works where priced competitively) to Kenya Shillings at the selling rates stated in clause 25.1.

26 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.
- 26.2 In evaluating tenders, the Employer will determine for each tender the evaluated tender price by adjusting the tender price as follows:
 - (a) Making any correction for errors pursuant to clause 24.
 - (b) Excluding Provisional Sums and provision, if any, for Contingencies in the Bills of Quantities, but including Day works where priced competitively.
- 26.3 The Employer reserves the right to accept any variation, deviation or alternative offer. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the tender documents or otherwise result in the accrual of unsolicited benefits to the Employer, shall not be taken into account in tender evaluation.
- 26.4 Price adjustment provisions in the Conditions of Contract applied over the period of execution of the Contract shall not be taken into account in tender evaluation.

- 26.5 If the lowest evaluated tender is seriously unbalanced or front loaded in relation to the Employer's estimate of the items of work to be performed under the Contract, the Employer may require the tenderer to produce detailed price analyses for any or all items of the Bills of Quantities, to demonstrate the relationship between those prices, proposed construction methods and schedules. After evaluation of the price analyses, the Employer may require that the amount of the Performance Security set forth in clause 29 be increased at the expense of the successful tenderer to a level sufficient to protect the Employer against financial loss in the event of subsequent default of the successful tenderer under the Contract.
- 26.6 Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not sub-contract work valued at more than 50% of the Contract Price excluding Provisional Sums to a non-indigenous sub-contractor.

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 Performance Guarantee

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

1. CLAUSE 2.1

Change to read "This invitation to tender is open to selected bidders".

2. OMIT

Clauses 4.3, 5.1 (a), (d), (f), (i), (j), 10.3, 10.4, 11.2, 11.3, 11.4, 15, 25, 26.6, 30

3. ADD TO CLAUSE 5.1 (h)

Form of agreement refers to the latest edition of the Kenya Association of Building Civil Engineering Contractors (KABCEC) document

4. ADD TO CLAUSE 13.1

Amount of tender surety will be Kshs. 235,000.00

5. ADD TO CLAUSE 13.2

Tender security to be valid for 150 days from tender opening date.

6. ADD TO CLAUSE 17.1

Only original tender document shall be submitted as stated in the tender notice.

7. ADD TO CLAUSE 28.4

Amend to read '.... within 21 days......'

8. ADD TO CLAUS E 29.1

Amend to read '.... within 21 days.....'

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

9. ADD TO CLAUSE 29.2

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

10. ADD TO CLAUSE 24

- i) In the event of a discrepancy between the tender amount as stated in the form of tender and the corrected tender figure in the main summary of the bills of quantities the amount as stated in the form of tender shall prevail.
- ii) The correction factor shall be computed by expressing the difference between the amount and the corrected tender sum as a percentage of the corrected sub-contract works. (i.e. corrected tender sum less PC and provisional sums)
- iii) The Error correction factor shall be applied to all contract works (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuation of variations.

11. ADD TO CLAUSE 26

The evaluation criteria as detailed on pages (A-15 to A-21) of this clause shall be applied.

TENDER EVALUATION CRITERIA

After tender opening, the tenders will be evaluated in 4 stages, namely:

- 1. Preliminary examination;
- 2. Technical evaluation;
- 3. Financial Evaluation; and
- 4. Recommendation for Award.

STAGE 1: PRELIMINARY EXAMINATION

This stage of evaluation shall involve examination of the pre-qualification conditions as set out in the Tender Advertisement Notice or Letter of Invitation to Tender and any other conditions stated in the bid document.

These conditions may include the following:

- i) Current Category of Registration with National Construction Authority (NCA) in the relevant trade;
- ii) Current Class of Licenses with the relevant statutory bodies e.g. Energy Regulatory Commission, County Governments, and Water Management Boards etc.;
- iii) Proof of payment for tender document if required;
- iv) The Bid has been submitted in the format required by the procuring entity;
- v) Provision of a tender Security, that is in the required form, amount and that the tender is valid for the period required;
- vi) Dully filled Form of Tender;
- vii) Valid Tax Compliance Certificate;
- viii) Dully filled Confidential Business Questionnaire;
- ix) Dully signed Statement of Compliance; and
- x) The required number of copies of the tender has been submitted and all required documents, information and samples have been submitted if stipulated in the tender, advertisement/Invitation letter.

Note:

The bid security shall be in accordance with clauses 13 and 23.2 of Instruction to Tenderers which states as follows:

- Clause 13.1 of Instruction to Tenderers, "the tenderers shall furnish as part of his tenders a tender surety in the amount stated in the tender document in the Appendix to Instructions to Tenderers".
- Clause 13.2 of Instruction to Tenderers, "the unconditional Tender surety shall be in Kenya shillings and be in form of a certified cheque, bank draft, an irrevocable letter of credit or a guarantee from a reputable Bank/Insurance approved by PPOA located in the Republic of Kenya. The format of the surety shall be in accordance with the sample form included in the tender documents and the tender surety shall be valid for 150 days from the date of tender opening".
- Clause 23.2 of Instruction to Tenderers: "For the purposes of this clause, a substantially responsive tender is one which conforms to all terms and condition and specifications of the tender document without material deviation or reservation and has a valid Bank/Insurance guarantee".

The employer/procuring entity may seek further clarification/confirmation if necessary to confirm authenticity/compliance of any condition of the tender. Further, in case of a discrepancy between the amounts stated in the appendix to instruction to tenderers and the one stated in the advertisement or invitation letter, the bid security shall be taken as the amount in the advertisement/letter of invitation.

The tenderers who do not satisfy any of the above requirements shall be considered Non-Responsive and their tenders will not be evaluated further

STAGE 2 TECHNICAL EVALUATION

A) Assessment for eligibility

The tender document shall be examined based on clause 2.2 of the Instruction to Tenderers which states as follows:

'In accordance with clause 2.2 of Instruction to Tenderers, the tenderers will be required to provide evidence for eligibility of the award of the tender by satisfying the employer of their eligibility under sub clause 2.1 of Instruction to Tenderers and adequacy of resources to effectively carry out the subject contract. The tenderers shall be required to fill the Standard Forms provided for the purposes of providing the required information. The tenderers may also attach the required information if they so desire.

The award of points for the STANDARD FORMS considered in this section shall be as shown below

<u>P</u>	<u>ARAMETER</u>	<u>MAXIMUM POINTS</u>	3
(i)	Tender Questionnaire	5	
(ii)	Key personnel	20	
(iii)	Contract Completed in the last Five (5) years	20	
(iv)	Schedules of on-going projects	8	
(v)	Schedules of contractors equipment	20	
(vi)	Audited Financial Report for the last 3 years	10	
(vii)	Evidence of Financial Resources	15	
(viii)	Litigation History	2	
	TOTAL	<u>100</u>	

The detailed scoring plan shall be as shown in table 1 below: -

TABLE 1: Assessment for Eligibility

Item	Description	Point Scored	Max.	Point
i.	Tender Questionnaire Form			
	• Completely filled 5		5	5
	• Not filled 0			
ii	Key Personnel (Attach evidence)			
	Director of the firm			
	Holder of degree in relevant Engineering field 6			
	• Holder of diploma in relevant Engineering field 5		6	
	Holder of certificate in relevant Engineering field 3			
	Holder of trade test certificate in relevant Engineering field2			
	No relevant certificate 1			
	At least 1No. degree/diploma of key personnel in relevant			
	Engineering fieldWith over 10 years relevant experience 6		6	20
	With over 16 years relevant experience With over 5 years relevant experience4			
	• With under 5 years relevant experience 2			
	 At least 1No certificate holder of key personnel in relevant Engineering field With over 10 years relevant experience		4	
	At least 2No artisan (trade test certificate in relevant			
	Engineering field)			
	• Artisan with over 10 years relevant experience 2		4	
	• Artisan with under 10 years relevant experience 1			
	Non skilled worker with over 10 years relevant experience			
iii	Contract completed in the last five (5) years (Max of 5 No.			
	 Projects)- Provide Evidence Project of similar nature, complexity and magnitude 4 Project of similar nature but of lower value than the one in consideration		2	0
iv	On-going projects – <u>Provide Evidence</u>			
	 Four and above Project of similar nature, complexity and magnitude		8	3

v	Schedule of contractors equipment and transport (proof or evidence of ownership/Lease)		
	a) Relevant Transport	10	
	Means of transport (Vehicle) 10		20
	No means of transport 0		
	b) Relevant Equipment		
	 Has relevant equipment for work being tendered No relevant equipment for work being tendered 	10	
	Financial report		
vi	a) Audited financial report (last three (3) years)		
	 Average Annual Turn-over equal to or greater the cost of the project	1	0
	 b) Evidence of Financial Resources (cash in hand, lines of credit, over draft facility etc.) Has financial resources to finance the projected monthly cash flow* for three months	1	5
	• Has financial resources less than the projected monthly cash flow*5 • Has not indicated sources of financial resources0		
vi	Litigation History		
	 Filled	2	2
	TOTAL	10	00

Any bidder who scores 60 points and above shall be considered for further evaluation

Monthly Cash Flow = Tender Sum/Contract Period

B) Compliance with Specialist Works specifications

In this section, the bid will be analyzed to determine compliance with General and Particular technical specifications for the works 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 of the Item/Equipment they propose to supply.

The tenderer shall also submit relevant technical brochures/catalogues with the tender document, highlighting the catalogue Numbers of the proposed items. Such brochures/catalogues should indicate comprehensive relevant data of the proposed equipment/items which should include but not limited to the following:

- a) Standards of manufacture:
- b) Performance ratings/characteristics;
- c) Material of manufacture;
- d) Electrical power ratings; and
- e) Any other necessary requirements (Specify).

Following the above analyses, where the proposed equipment is found not to conform to the stipulated specifications, the tender will be deemed Non-Responsive and will not be evaluated further.

C) Assessment of deviations

Pursuant to section 64 of the act, a tender is deemed responsive if it conforms to all the mandatory requirements and it **does not contain major** deviations. Section 23.2 of the instruction to tenderers, defines major deviations as

- a) One that affects in a substantial way the scope, quality, completion timing, administration of works to be undertaken by the tenderer under the contract, inconsistent with the tender document; or
- b) Which limits in any substantial way the rights of the employer or the tenderers obligations; or
- c) Whose rectification would affect unfairly the competitive position of other tenderers presenting substantially responsive tenders.

Where the deviations are minor in the view of the tender committee, with the concurrence of the procuring entity representative, the evaluation committee shall quantify such deviations pursuant to section 64 (3) of the act which requires that a minor deviation shall:

- a) Be quantified to the extent possible; and
- b) Be taken into account in the evaluation and comparison of tenders.

Where the deviation in the view of the tender committee with the concurrence of the procuring entity representative is major, the tender shall be deemed **non-responsive and will not be evaluated further**

TABLE 2: Assessment of Deviations

Item	Does the Deviation Substantively Affect the following?	YES	NO
	Scope of the Works or Services to be delivered		
1			
2	Quality of the Works or Services to be delivered		
3	Completion Timing		
4	Administration of the Works		

5	Consistency with the tender document	
6	Rights of the Employer in a negative manner	
7	Limit the Tenderer's Obligation	
8	Affect unfairly the competitive position of other tenderers	
	COMMENT	

Any bidder who OBTAINS A YES in the above table shall be considered NON-RESPONSIVE and shall not be evaluated further.

STAGE 3 - FINANCIAL EVALUATION

Upon completion of the technical evaluation a detailed financial evaluation shall follow. The financial evaluation shall proceed in the manner described in the Public Procurement and Disposal Act (2005) of the laws of Kenya (Section 66) and the Public Procurement and Disposal Regulations, 2006 specifically section 50 (1), (2), and (3).

The evaluation shall be in **three stages**

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

A) Preliminary Examinations

The preliminary examination in the Financial Evaluation shall be in accordance with clause 26 of Instruction to Tenderers.

The parameter to be considered under this section includes;

Arithmetic Errors

The bid shall be checked for arithmetic errors based on the rates and the total sums indicated in the bills of quantities.

a) Confirmation shall be sought in writing from the tenderers whose tender sums will be determined to have a significant arithmetic error to their disadvantage, to confirm whether they stand by their tender sums. The error shall be treated as per clause 24 of Instructions to Tenderers.

Non compliance with the above shall lead to automatic disqualification from further evaluation.

Discount if any shall be treated as an error in pursuant to **clause 26.3** of Instructions to Tenderers

B) Comparison of rates-

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

The evaluation committee shall evaluate the responses and make an appropriate recommendation to the procuring entity's tender committee 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.

C) Consistency of the Rates

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

STAGE 4 - RECOMMENDATION FOR AWARD

The successful bidder shall be the tenderer with the lowest evaluated tender price.

SECTION B: CONDITIONS OF CONTRACT

CONDITIONS OF CONTRACT (MAIN WORKS)

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CONDITIONS OF CONTRACT

1.0 Definitions

- 1.1 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.
- "Compensation Events" are those defined in clause 24 hereunder
- "Completion date" means the date of completion of the works as certified by the Project Manager, in accordance with Clause 31.
- "The Contract" Means the agreement entered into between the Employer and the Contactor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works,
- "The Contractor" refers to the person or corporate body whose tender to carry out the Works has been accepted by the Employer.
- "The Contractor's Tender" is the completed tendering document submitted by the Contactor to the Employer.
- "The Contract Price" is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
- "Days" are calendar days; "months" are calendar months.
- "Defects" is any piece of work not completed in accordance with the Contract.
- "The Defects Liability Certificate" is the certificate issued by project Manager upon correction of defects by the Contractor.
- "The Defects Liability Period" is the period named in the Contract Data and calculated from the Completion Date.
- "Drawings" include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- "Dayworks" are Work inputs subject to payment on a time basis for labour and the associated materials and plant.
- "Employer" or the "procuring entity" as defined in the Public Procurement Regulations (i.e. Central or Local Government administration, Universities, Public Institutions and Corporations, etc. is the party who employs the Contractor to carry out the Works.

- "Equipment" is the Contractor's machinery and vehicles brought temporarily to the Site for the execution of the Works.
- "The intended completion date" is the date on which it is intended that the Contractor shall complete the works. The intended Completion Date may be revised only by the Project manager by issuing an extension of time or acceleration in the Works.
- "Materials" are all supplies, including consumables, used by the Contractor for incorporation in order.
- "Plant" is any integral part of the Works that shall have a mechanical, electrical, chemical or biological function.
- **"Project Manager"** is the person named in the Appendix to Conditions of Contract (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract and shall be an "Architect" or a "Quantity Surveyor registered under the Architects and Quantity Surveyors Act Cap 525 or an "Engineer" registered under Engineers Registration Act Cap 530.
- "Site" means the place or places where the permanent Works are to be carried out including workshops where the same is being prepared.
- "Site Investigation Reports" are those reports that may be included in the tendering documents which are factual and interpretative about the surface and subsurface conditions at the Site.
- "Specifications" means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- "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.
- **"Employer's Representative"** is the person appointed by the Employer and notified to the Contractor for the purpose of supervision 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. Interpretation

- 2.1. In interpreting the Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning in English Language unless specifically defined. The Project Manager will provide instructions clarifying queries about these Conditions of Contract.
- 2.2. If sectional completion is specified in the Appendix to Conditions of Contract, reference in the Conditions of Contract to the Works, the Completion Date and the Intended Completion Date apply to any section of the Works (other than references to the Intended Completion Date for the whole of the Works).
- 2.3. The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;
 - (1) Agreement,
 - (2) Letter of acceptance,
 - (3) Contractor's Tender,
 - (4) Appendix to Conditions of Contract,
 - (5) Conditions of Contract,
 - (6) Specifications,
 - (7) Drawings,
 - (8) Bills of Quantities,
 - (9) Any other documents listed in the Appendix to Conditions of Contract as forming part of the contract.
- 2.4. Immediately after the execution of the contract, the Project Manager shall furnish both the Employer and the Contractor with two copies each of all the Contract documents. Further, as and when necessary the Project manager shall furnish the Contractor {always with a copy to the Employer) with three ({3} copies of such further drawings or details or descriptive schedules as are reasonably necessary either to explain or amplify the Contract drawings or to enable the Contractor to carry out and complete the Works in accordance with these Conditions.

3. Language and Law

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

4. Project Manager's Decisions

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

5. Delegation

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

6. Communications

6.1. Communication between parties shall be effective only when in writing. A notice shall be effective only when it is delivered.

7. Subcontracting

7.1. The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.

8. Other Contractors

8.1. The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities etc. as listed in the Appendix to Conditions of Contract and also with the Employer, as per the directions of the Project Manager. The Contractor shall also provide facilities and services for them. The employer may modify the said List of Other Contractors etc., and shall notify the Contractor of any such modification.

9. Personnel

9.1. The Contractor shall employ the key personnel named in the Qualification Information, to carry out the functions stated in the said information or other personnel approved by the Project Manager. The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Qualification Information. If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within Seven days and has no further connection with the Work in the Contract.

10. Works

10.1. The Contractor shall construct and install the works in accordance with the Specifications and Drawings. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

11. Safety and Temporary Works

11.1. The Contractor shall be responsible for the design of temporary works. However before erecting the same, he shall submit his designs including specifications and drawings to the Project Manager and to any other relevant third parties for their approval. No erection of temporary works shall be done until such approvals are obtained.

11.2. The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary works and all drawings prepared by the Contractor for the execution of the temporary or permanent works, shall be subject to prior approval by the Project Manager before they can be used. The Contractor shall be responsible for the safety of all activities on the Site.

12. Discoveries

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

13. Work Program

- 13.1. Within the time stated in the appendix to Conditions of Contract, the Contractor shall submit to the Project Manager for approval a program showing the general methods, arrangements, order, and timing for all the activities in the Works. An update of the program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 13.2. The Contractor shall submit to the Project Manager for approval an updated program at intervals no longer than the period stated in the Appendix to Conditions of Contract.
- 13.3. If the Contractor does not submit an updated program within this period, the Project Manager may withhold the amount stated in the said Appendix from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted.
- 13.4. The Project Manager's approval of the program shall not alter the Contractor's obligations. The Contractor may revise the program and submit it to the Project Manager again at any time. A revised program shall show the effect of Variations and Compensation Events.

14. Possession of Site

14.1. The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Appendix to Conditions of Contract, the Employer will be deemed to have delayed the start of the relevant activities, and this will be Compensation Event.

15. Access to Site

15.1. The Contractor shall allow the Project manager and any other person authorized by the Project Manager, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

16. Instructions

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

17. Extension of Acceleration of Completion Date

- 17.1. The Project manager shall extend the Intended Completion Date if a Compensation Event occurs or a variation is issued which makes it impossible for completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost. The Project Manager shall decide whether and by how much to extend the Intended Completion Date with 21 days of the Contractor asking the Project Manager in writing for a decision upon the effect of a Compensation Event or variation and submitting full supporting information. If the Contractor has failed to give early warning of a caused by such failure shall not be considered in assessing the new (extended) Completion Date.
- 17.2. No bonus for early completion of the Works shall be paid to the Contractor by the Employer

18. Management Meetings

18.1. A contract management meeting shall be held monthly and attended by the Project Manager and the Contractor. Its business shall be to review the plans for the remaining Work and to deal with matters raised in accordance with the early warning procedure. The Project manager shall record the minutes of management meetings and provide copies of the same to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

19. Early Warning

- 19.1. The Contractor shall warn the Project at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the Work increase the Contract Price or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 19.2. The Contractor shall cooperate with the Project Manager in making and considering proposals on how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the Work and in carrying out any resulting instruction of the Project Manager.

20. Defects

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

21. Bills of Quantities

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

22. Variations

22.1. All variations shall be included in updated programs produced by the Contractor.

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

23. Payment Certificates, Currency of Payments and Advance Payments

- 23.1. The Contractor shall submit to the Project Manager monthly applications for payment giving sufficient details of the Work done and materials on Site and the amounts which the Contractor considers himself to be entitles to. The Project Manager shall check the monthly application and certify the amount to be paid to the Contractor within 14 days. The value of work executed and payable shall be determined by the Project Manager.
- 23.2. The value of work executed shall comprise the value of the quantities of the items in the Bills of Quantities completed; materials delivered on site, variations and compensation events. Such materials shall become the property of the Employer once the Employer has paid the Contractor for their value. Thereafter, they shall not be removed from site without the Project Manager's instructions except for use upon the works.

- 23.3. Payments shall be adjusted for deductions for retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of issue of each certificate. If the Employer makes a late payment, the Contractor shall be paid simple interest on the late payment in the next payment. Interest shall be calculated on the basis of number of days delayed at a rate three percentage points above the Central Bank of Kenya's average rate for base lending prevailing as of the first day the payment becomes overdue.
- 23.4. If an amount certified is increased in a later certificate of a result of an award by an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 23.5. Items of the works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 23.6. The Contract Price shall be stated in Kenya Shillings. All payments to the contractor shall be made in Kenya Shillings and foreign currency in the proportion indicated in the tender, or agreed prior to the execution of the Contract Agreement and indicated therein.
- 23.7. The rate of exchange for the calculation of the amount of foreign currency payment shall be the rate of exchange indicated in the Appendix to Conditions of Contract. If the contractor indicated foreign currencies for payment other than the currencies of the countries of origin of related goods and services. The Employer reserves the right to pay the equivalent at the time pf payment in the currencies of the countries of such goods and services.
- 23.8. The Employer and the Project manager shall be notified promptly by the Contractor of an changes in the expected foreign currency requirements of the Contractor during the execution of the works as indicated in the Schedule of Foreign Currency Requirements and the foreign and local currency portions of the balance of the Contract Price shall then be amended by agreement between Employer and the Contractor in order to reflect appropriately such changes.
- 23.9. In the event that an advance payment is granted, the following shall apply:
 - a) On signature of the Contract, the Contractor shall at his request, and without furnishing proof of expenditure, be entitled to an advance of 10% (ten percent) of the original amount of the contract. The advance shall not be subject to retention money.
 - b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.

- c) Reimbursement of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the contract. It shall have been completed by the time 80% of this amount is reached.
- 23.10. The amount to be repaid by way of successive deductions shall be calculated by means of the formula:

$$R = \frac{A(X^1 - X^{11})}{80 - 20}$$

Where:

R = the amount to be reimbursed

A = the amount of the advance which has been granted

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

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

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

24. Compensation Events

- 24.1. The following issues shall constitute Compensation Events.
 - a) The Employer does not give access to a part of the site by the Site Possession Date stated in the Appendix to Conditions of Contract.
 - b) The Employer modifies the List of Other Contractors, etc., in a way that affects the Work of the Contractor under the Contract.
 - c) The Project Manager orders a delay or does not issue drawings, specifications or instructions required for execution of the works on time.
 - d) The Project Manager instructs the contractor to uncover or to carry out additional tests upon the work, which is then found to have no defects.

- e) The Project Manager unreasonably does not approve a subcontract to be let.
- f) Ground conditions are substantially more3 adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to tenderers (including the site investigation reports), from information available publicly and from a visual inspection of the site.
- g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer or additional works required for safety or other reasons.
- h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- i) The effects on the Contractor of any of the Employer's risks.
- j) The Project Manager unreasonably delays issuing a Certificate of Completion.
- k) Other compensation events described in the Contract or determined by the Project manager shall apply
- 24.2. If a compensation event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 24.3. As soon as information demonstrating the effect of each compensation event upon the Contractor's forecast cost has been provided by the Contract, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly.
- 24.4. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager will assume that the Contractor will react competently and promptly to the event.
- 24.5. The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having co-operated with the Project Manager.
- 24.6. Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the Appendix to Conditions of Contract.

- 24.7. The Contractor shall give written notice to the Project Manager of his intention to make a claim within thirty days after the event giving rise to the claim has first arisen. The claim shall be submitted within thirty days thereafter.
- 24.8. Provided always that should the event giving rise to the claim of continuing effect, the Contractor shall submit an interim claim within the said thirty days and a final claim within thirty days of the end of the event giving rise to the claim.

25. Price Adjustment

- 25.1. The Project Manager shall adjust the Contract Price if taxes, duties and other levies are changed between the date 30 days before the submission of tenders for the Contract and the date of Completion. The adjustment shall be the change in the amount of tax payable by the Contractor.
- 25.2. The Contract Price shall be deemed to be based on exchange rates current at the date of tender submission in calculating the cost to the Contractor of materials to be specifically imported (by express provision in the Contract Bills of Quantities or Specifications) for permanent incorporation in the Works.
- 25.3. Unless otherwise stated in the Contract, if any time during the period of the Contract exchange rates shall be varied and this shall affect the cost to the Contractor of such materials, then the Project Manager shall assess the net difference in the cost of such materials. Any amount from time to time so assessed shall be added to or deducted from the Contract Price, as the case may be.
- 25.4. Unless otherwise stated in the Contract, the Contract Price shall be deemed to have been calculated in the manner set out below and in sub-clauses 25.4 and 25.5 and shall be subject to adjustment in the events specified thereunder;
 - i) The price contained in the Contract Bills of Quantities shall be deemed to be based upon the rates of wages and other emoluments and expenses as determined by the Joint Building Council of Kenya (J.B.C.) and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.
 - ii) Upon J.B.C. determining that any of the said rates of wages or other emoluments and expenses are increased or decreased, then the Contract Price shall be increased or decreased by the amount assessed by the Project Manager based upon the difference, expressed as a percentage, between the rate set out in the schedule of basic rated issued 30 days before the date for submission or tenders and the rate published by the J.B.C. and applied to the quantum of labour incorporated within the amount of work remaining to be executed at the date of publication of such increase or decrease.

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

26. Retention

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

27. Liquidate Damages

- 27.1. The Contractor shall pay liquidated damages to the Employer at the rate stated in the Appendix to Conditions of Contract for each day that the actual Completion Date is later than the Intended Completion Date. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not alter the Contractor's liabilities.
- 27.2. If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rate specified in Clause 23.30.

28. Securities

28.1. The Performance Security shall be provided to the Employer not later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a reputable bank acceptable to the Employer, and denominated in Kenya shillings. The Performance Security shall be valid until a date 30 days beyond the date of issue of the Certificate of Completion.

29. Dayworks

- 29.1. If applicable, the Dayworks rates in the Contractor's tender shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 29.2. All work to be paid for as Dayworks shall be recorded by the Contractor on Forms approved by the Project Manager. Each completed form shall be verified and signed by the Project manager within two days of the work being done.
- 29.3. The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

30. Liability and Insurance

- 30.1. From the Start Date until the Defects Correction Certificate has been issued, the following are the Employer's risks:
 - a) The risk of personal injury, death or loss of or damage to property (excluding the works, plant, materials and equipment), which are due to;
 - i) use or occupation of the site by the works or for the purpose of the works, which is the unavoidable result of the works, or
 - ii) negligence, breach of statutory duty or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
 - b) The risk of damage to the works, plant, materials, and equipment to the extent that it is due to a fault of the Employer or in Employer's design, or due to war or radioactive contamination directly affecting the place where the works are being executed.
 - 30.2. From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the works, plant, and materials is the Employer's risk except loss or damage due to;
 - a) a defect which existed on or before the Completion Date.
 - b) An event occurring before the Completion Date, which was not itself the Employer's risk.
 - c) The activities of the Contractor on the Site after the Completion Date.

30.3. From the Start Date until the Defects Correction Certificate has been issued, the risks of personal injury, death and loss of or damage to property (including, without limitation, the works, plant, materials, and equipment) which are not Employer's risk are contractor's risks.

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

- a) loss of or damage to the works, plant and materials;
- b) loss of or damage to Equipment;
- c) loss of or damage to property (except the works, plant materials, and equipment) in connection with the Contract, and
- d) Personal injury or death.
- 30.4. Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation required to rectify the loss or damage incurred.
- 30.5. If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 30.6. Alterations to the terms of insurance shall not be made without the approval of the Project Manager. Both parties shall comply with any conditions of insurance policies.

31. Completion and Taking over

31.1. Upon deciding that the works are complete, the Contractor shall issue a written request to the Project Manager to issue a Certificate of Completion of the works. The Employer shall take over the site and the works within seven (7) days of the Project manager's issuing a Certificate of Completion.

32. Final Account

- 32.1. The Contractor shall issue the Project Manager with a detailed account of the total amount that the Contractor considers payable to him by the Employer under Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete.
- 32.2. If it is not, the Project Manager shall issue within 30 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a Payment Certificate.

32.3. The Employer shall pay the Contractor the amount due in the Final certificate within 60 days.

33. Termination

- 33.1. The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following;
 - a) The Contractor stops work for 30 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Project Manager.
 - b) The Project Manager instructs the Contractor to delay the progress of the works, and the instruction is not withdrawn within 30 days.
 - c) The Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation.
 - d) A payment certified by the Project Manager is not paid by the Employer to the Contractor within 30 days (for Interim Certificate) or 60 days (for Final Certificate) of issue.
 - e) The Project Manager gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager.
 - f) The Contractor does not maintain a security, which is required.
- 33.2. When either party to the contract gives notice of Contract to the Project Manager for a cause other than those listed under Clause 33.1 above, the Project Manager shall decide whether the breach is fundamental or not.
- 33.3. Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 33.4. If the Contractor is terminated, the contractor shall stop work immediately, make the site safe and secure, and leave the site as soon as reasonably possible.
- 33.5. The Project Manager shall immediately thereafter arrange for a meeting for the purpose of taking record of the works executed and materials, goods, equipment and temporary buildings on site.

34. Payment Upon Termination

- 34.1. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and materials ordered and delivered to site up to the issue of the certificate. Additional liquidated damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable by the contractor.
- 34.2. If the contract is terminated for the Employer's convenience or because of a fundamental breach of contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, materials ordered, the reasonable cost of removal of equipment, repatriation of the Contractor's personnel employed solely on the works, and the Contractor's costs of protecting and securing the works.
- 34.3. The Employer may employ and pay other persons to carry out and complete the works and to rectify and defects and may enter upon the works and use all materials on the site, plant, equipment and temporary works.
- 34.4. The contractor shall, during the execution or after the completion of the works under this clause remove from the site as and when required, within such reasonable time as the Project Manager may in writing specify, any temporary building, plant, machinery, appliances, goods or materials belonging to or hired by him, and in default the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, hold the proceeds less all costs incurred to the credit of the Contractor.
- 34.5. Until after completion of the works under this clause the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts therefore the Project Manager shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract the difference shall be a debt payable to the Employer by the Contract; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

35. Release from Performance

35.1. If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it.

36. Corrupt gifts and Payment of Commission

- 36.1. The Contractor shall not:
 - a) Offer or give or agree to give to any person in the service of the Employer any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for the Employer or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract for the Employer.
 - b) Enter into this or any other contract with the Employer in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the Employer.
- 36.2. Any breach of this Condition by the Contractor or by anyone employed by his or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement Regulations issued under the Exchequer and Audit Act Cap 412 of the Laws of Kenya.

37. Settlement of Disputes

- 37.1. In case any dispute or difference shall arise between the Employer or the Project Manager on his behalf and the Contractor, either during the progress or after the completion or termination of the works, such dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the Chairman or Vice Chairman of any of the following professional institutions:
 - (i) Architectural Association of Kenya
 - (ii) Institute of Quantity Surveyors of Kenya
 - (iii) Association of Consulting Engineers of Kenya
 - (iv) Chartered Institute of Arbitrators (Kenya Branch)
 - (v) Institute of Engineers of Kenya
- 37.2. On the request of the applying party, the institution written to first by the aggrieved party shall take precedence over all other institutions.

- 37.3. The arbitration may be on the construction of this Contract or on any matter or thing of whatsoever nature arising hereunder or in connection therewith, including any matter or thing left by this Contract to the discretion of the Project Manager, or the withholding by the Project Manager of any certificate to which the Contractor may claim to be entitled to or the measurement and valuation referred to in clause 23.0 of these conditions, or the rights and liabilities of the parties subsequent to the termination of Contract.
- 37.4. Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
- 37.5. Notwithstanding the issue of a notice as stated above, the arbitration of such a dispute or difference shall not commence unless an attempt has in the first instance been made by the parties to settle such dispute or difference amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 37.6. Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the works or abandonment of the works or termination of the Contract by either part:
 - a. The appointment of a replacement Project Manager upon the said person ceasing to act.
 - b. Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
 - c. Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
 - d. Any dispute or difference arising in respect of war risks or war damage.
- 37.7. All other matter shall only be referred to arbitration after the completion or alleged completion of the works or termination or alleged termination of the Contract, unless the Employer and the Contractor agree otherwise in writing.
- 37.8. The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be 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.
- 37.9. The award of such Arbitrator shall be final and binding upon the parties.

APPENDIX TO CONDITIONS OF CONTRACT

CONDITIONS OF CONTRACT CLAUSE 1

The Employer is: Government of the Republic of Kenya,

Represented by: The Principal / CEO

Kenya Utalii College P.O Box 31052-00600

Nairobi.

Name of Employer's Representative: The Principal / CEO

Kenya Utalii College P.O Box 31052-00600

Nairobi.

CONDITIONS OF CONTRACT CLAUSE 1

The Project Manager is: The Chief Architect, Ministry of Transport, Infrastructure, Public Works, Housing and Urban Development – State Department of Public Works, Nairobi

Address: P.O. Box 30743 - 00100, NAIROBI

CONDITIONS OF CONTRACT CLAUSE 1

The name (and identification number) of the Contract is :proposed construction of individual training kitchen for Kenya Utalii College along Thika Road in Nairobi.

CONDITIONS OF CONTRACT CLAUSE 1

The contract works consist of the proposed supply, installation, testing and commissioning of internal plumbing and drainage, water reticulation and fire protection installation works at Kenya Utalii College along Thika Road in Nairobi.

CONDITIONS OF CONTRACT CLAUSE 1

The start date shall be as stated in the letter of acceptance

CONDITIONS OF CONTRACT CLAUSE 1

The Intended Completion Date for the whole of the Works shall be as stated in the Letter of Acceptance.

CONDITIONS OF CONTRACT CLAUSE 2

The following documents also form part of the Contract: Only as listed in Clause 2 of the conditions of contract.

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

CONDITIONS OF CONTRACT CLAUSE 1

The Site is located along Thika road in Nairobi.

CONDITIONS OF CONTRACT CLAUSE 13

The contractor shall submit a revised program for the works within **7 days** of delivery of the letter of acceptance.

CONDITIONS OF CONTRACT CLAUSE 1

The Defects Liability Period is 6 months from practical completion date

CONDITIONS OF CONTRACT CLAUSE 32

Period of final measurement: 6 months after practical completion

INSTRUCTION TO TENDERERS CLAUSE 20

The tender opening date and time is as stated in the Tender Invitation Notice.

INSTRUCTION TO TENDERERS CLAUSE 20

The name and Address of the Employer's representative for the purposes of submission of Tenders is as stated in the Tender Invitation Notice

INSTRUCTION TO TENDERERS CLAUSE 13

Amount of Tender Security is Kshs. 235,000.00

INSTRUCTION TO TENDERERS CLAUSE 29

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

CONDITIONS OF CONTRACT CLAUSE 27

Liquidated and Ascertained damages: At the rate of Kshs. 15,000.00 per week or part thereof.

CONDITIONS OF CONTRACT CLAUSE 23

Period of honouring certificate : 30 days

Percentage of certified value retained: 10%

Limit of certified value retained : 5%

Period between program updates is **14 days**

The completion period for the Contract works: as per the main works contract

OMIT CLAUSE 23.7

AGREEMENT AND CONDITIONS OF SUB-CONTRACT FOR BUILDING WORKS



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and
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PART II SUB-CONTRACT AGREEMENT (KABCEC)

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COUNTERPART

Embossed stamp

Embossed stamp

1.0 AGREEMENT

1.1	This agreement is made on			
	between			
	of (or whose registered office is situated at)			
	(hereinafter called "the Contractor") of the one part			
	and			
	of (or whole registered office is situated at)			
	(hereinafter called "the Sub-Contractor") of the other part:			
1.2	SUPPLEMENTAL to an agreement(hereinafter referred to as the "the main 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			
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 And whereas the Architect, with the approval of the Employer, has nominated the Sub-Contractor to carry out the works described at clause 1.3 herein:

NOW IT IS HEREBY AGREED AS FOLLOWS:

1.6	For the consideration herein stated, the Sub-Contractor shall upon and subject to the conditions annexed hereto carry out and complete the sub-contract works shown upon the sub-contract drawings and described by or referred to in the sub-contract bills, specifications and in the said conditions.
1.7	The Contractor shall pay the Sub-Contractor the sum of the Kshs (in words)
	Kshs)
	(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	administer the sub-contract in accordance with the main contract agreement. Where applicable, reference to the Architect shall be deemed to include reference to the Engineer.
1.9	In the even of the need to appoint a replacement Architect, Quantity Surveyor, Engineer or other specialist (whether named in this agreement or not) the Employer shall make such appointment as soon as practicable after the need for such appointment arises and shall communicate the appointment to the Sub-Contractor through the Contract.
1.10	Where the sub-contract does not incorporate bills of quantities, the term "sub-contract bills" and "bills of quantities" wherever appearing shall be deemed deleted and replaced with the term "schedule of rates" as applicable.
1.11	The terms defined in clause 1.0 of the main contract shall have the same meaning in this sub-contract as that assigned to them therein.
1.12	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 Timorously 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
- 2.3 Observe, 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.

3.0 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

4.0 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 sub-contract 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.

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.

5.0 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.

6.0 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 there from, 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.
- 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

- 8.1 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
- 8.2 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 Sub-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.
- 12.6 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-contractors, and in particular:
- 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 other and co-ordinate work arrangements and procedures required in carrying preventing 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 other 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 sub-contract shall terminate immediately upon (for whatever reason) of the main contract.

16.0 WORK PRIOR TO APPOINTMENT OF CONTRACTOR

- Where the Sub-Contractor is appointed before the Contractor is appointed, any workdoneby the Sub-Contractor prior to the said appointment shall be treated as a separatecontractbetween 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
- 16.3 Where 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 involvement of the Contractor. The cost of equipment, facilities and the like 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.

17.0 SUB-CONTRACTOR DESIGN

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 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 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 the same shall apply to the subcontract 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 sub-contract works as it has on the main contract works.
- 22.2 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 there from.
- 22.3 If the suspension arises due to default by the sub-contractor, the sub-contractor shall be liable to the contractor for all expenses arising there from.
- 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.

22.5 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 interim 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.
- 23.4 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.
- 23.8 Where the Contractor has received payment from the Employer but has 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 deem necessary.
- 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 rom him to the Sub-Contractor in interim certificates any sum or sums which the Sub-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.
- 24.2 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 sub-clause 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 previously 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 shall 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

- 26.1.1 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.
- 26.3 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.
- 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 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
- 28.4 The occurrence of such loss or damage shall be disregarded in computing any amounts payable to the Sub-Contractor under the sub-contract, and
- 28.5 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 the 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 TRMINATION OF SUB-CONTRACT.

- Without prejudice to any other rights and remedies which the contractor may possess, if the subcontractor 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 contract 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 there from.

31.0 SETTLEMENT OF DISPUTES

- 31.1 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 Chairman or Vice Chairman of the Architectural Association of Kenya or the Chairman or Vice Chairman of The Chartered Institute of Arbitrators, Kenya Branch, at the request of the applying party.
- 31.3 The arbitration may be on the construction of this sub-contract or on any matter or thing of whatsoever nature arising there under 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 sub-contact 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.
- 31.6 Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference where notice of a dispute or difference 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.

- 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 subcontract without having to comply with sub clause 31.8 herein.
- 31.9.1 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.
- 31.10 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.
- 31.14 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	
to be paid by us to the said	(CONTRACTOR)
WHEREAS by an agreement in writing dated	
	(SUB-CONTRACTOR)
entered into a sub-contract with	(CONTRACTOR)
to carry out and complete the works therein stated specified all in accordance with he provisions of the	e said sub-contract, namely: (description of works)
default by the Sub-Contractor the surety shall sati thereby up to the amount of the above written bo in full force and effect. Upon default, and without	such that if the said Sub-Contractor, his hall duly perform his obligations under the Sub-Contract, if on sfy and discharge the damages sustained by the Contractor and, then this obligation shall be void, otherwise it shall remain at prejudice to his other rights under the Sub-Contract, the of the bond and we undertake to honour the demand in the
Contract or in the extend or nature of the works t	declared that no alteration in the terms of the said Sub- to be carried out and no extension of time by the Contractor is surety from any liability under the above written bond.
IN WITNESS whereof we have set out hand this	day of
Surety	Witness
Authrorised of Power of Attoney 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
Sub-Contract Period	8.2
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:	
CONTRACTOR	SUB-CONTRACTOR

APPENDIX TO KABCEC

- (1) Amend clause 17

 Replace 'Architect' with "Engineer"
- (2) Amend clause 7

 The surety **must** be from an Established/Reputable Bank, and is 5%
- (3) Amend clause 28

 This is a firm price contract

SECTION E

PARTICULAR SPECIFICATIONS FOR PLUMBING AND DRAINAGE

SECTION E

PARTICULAR PLUMBING AND DRAINAGE SPECIFICATIONS

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SECTION E

PARTICULAR SPECIFICATIONS FOR PLUMBING AND DRAINAGE

3.1 **GENERAL**

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

3.2 MATERIALS AND STANDARDS

3.2.1 **Pipework and Fittings**

Pipework materials are to be used as follows:

a) Galvanized Steel Pipework

Galvanized steel pipe work up to 65mm nominal bore shall be manufactured in accordance with B.S. 1387 Medium Grade, with tapered pipe threads in accordance with B.S. 21. All fittings shall be malleable iron and manufactured in accordance with B.S. 143.

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

Galvanized steel pipe work, 80mm nominal bore up to 150mm nominal bore shall be manufactured to comply in all respects with the specification for 65mm pipe, except that screwed and bolted flanges shall replace unions and couplings for the jointing of pipes to valves and other items of plant. All flanges shall comply with the requirements of B.S. 10 to the relevant classifications contained hereinafter under Section 'C' of the Specification.

Galvanizing shall be carried out in accordance with the requirements of B.S. 1387 and B.S. 143 respectively.

b) <u>Copper Tubing</u>

All copper tubing shall be manufactured in accordance with B.S. 2871 from C.160 'Phosphorous De-oxidized Non-Arsenical Copper' in accordance with B.S. 1172.

Pipe joints shall be made with soldered capillary fittings and connections to equipment shall be with compression fittings manufactured in accordance with B.S. 864.

Short copper connection tubes between galvanized pipe work and sanitary fitments shall not be used because of the risk of galvanic action.

If, as may occur in certain circumstances, it is not possible to make the connection in any way than the use of copper tubing, then a brass straight connector shall be positioned between the galvanized pipe and the copper tube in order to prevent direct contact.

c) P.V.C. (Hard) Pressure Pipes and Fittings

All P.V.C. pipes and fittings shall be manufactured in accordance with B.S. 3505: 1968.

Jointing

The method of jointing to be employed shall be that of solvent welding, using the pipe and manufacturer's approved cement. Seal ring joint shall be introduced where it is necessary to accommodate thermal expansion.

Testing

Pipelines shall be tested in sections under an internal water pressure normally one and a half times the maximum allowable working pressure of the class of pipe used. Testing shall be carried out as soon as practical after laying and when the pipeline is adequately anchored. Precautions shall be taken to eliminate all air from the test section and to fill the pipe slowly to avoid risk of damage due to surge.

d) A.B.S. Waste System

Where indicated on the Drawings and Schedules, the Sub-contractor shall supply and fix A.B.S. waste pipes and fittings.

The pipes, traps and fittings shall be in accordance with the relevant British Standards, including B.S. 3943, and fixed generally in accordance with manufacturer's instructions and B.S. 5572: 1978.

Jointing of pipes shall be carried out by means of solvent welding, the manufacturer's instructions and B.S. 5572: 1978.

Jointing of pipes shall be carried out by means of solvent welding. The manufacturer's recommended method of joint preparation and fixing shall be followed.

Standard brackets, as supplied for use with this system, shall be used wherever possible. Where the building structure renders this impracticable the Sub-contractor shall provide purpose made supports, centers of which shall not exceed one meter.

Expansion joints shall be provided as indicated. Supporting brackets and pipe clips shall be fixed on each side of these joints.

e) PVC Soil System

The Sub-contractor shall supply and fix PVC soil pipes and fittings as indicated on the Drawings and Schedules.

Pipes and fittings shall be in accordance with relevant British Standards, including B.S. 4514 and fixed to the manufacturer's instructions and B.S. 5572.

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

Connections to WC pans shall be effected by the use of a WC connector, gasket and cover, fixed to suit pan outlet.

Suitable supporting brackets and pipe clips shall be provided at maximum of one metre centres.

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

3.2.2 <u>Valves</u>

a) Draw-off Taps and Stop Valves (Up to 50mm Nominal Bore)

Draw-off taps and valves up to 50mm nominal bore, unless otherwise stated or specified for attachment or connection to sanitary fitment shall be manufactured in accordance with the requirements of B.S.1010.

b) Gate Valves

All gate valves 80mm nominal bore and above, other than those required for fitting to buried water mains shall be of cast iron construction, in accordance with the requirements of B.S. 3464. All gate valves required for fitting to buried water mains shall be of cast iron construction in accordance with the requirements of B.S.1218.

All gate valves up to and including 65mm nominal bore shall be of bronze construction in accordance with the requirements of B.S. 1952.

The pressure classification of all valves shall depend upon the pressure conditions pertaining to the site of works.

c) <u>Globe Valves</u>

All globe valves up to and including 65mm nominal bore shall be of bronze construction in accordance with the requirements of B.S.3061.

The pressure classification of all globe valves shall depend upon the pressure conditions pertaining to the site of works.

3.2.3 Waste Fitment Traps

a) Standard and Deep Seal P & S Traps

Where standard or deep seal traps are specified they shall be manufactured in suitable non-ferrous materials in accordance with the full requirements of B.S. 1184.

In certain circumstances, cast iron traps may be required for cast iron baths and in these instances bath traps shall be provided which are manufactured in accordance with the full requirements of B.S.1291.

b) <u>Anti-Syphon Traps</u>

Where anti-syphon traps are specified, these shall be similar or equal to the range of traps manufactured by Greenwood and Hughes Limited, Deacon Works Littleshampton, Sussex, England.

The trade name for traps manufactured by this company is 'Grevak'.

3.2.4 **Pipe Supports**

a) General

This sub-clause deals with pipe supports securing pipes to the structure of buildings for above ground application.

The variety and type of support shall be kept to a minimum and their design shall be such as to facilitate quick and secure fixings to metal, concrete, masonry or wood.

Consideration shall be given, when designing supports, to the maintenance of desired pipe falls and the restraining of pipe movements to a longitudinal axial direction only.

The Sub-contractor shall supply and install all steelwork forming part of the pipe support assemblies and shall be responsible for making good damage to builders work associated with the pipe support installation.

The Sub-contractor shall submit all his proposals for pipe supports to the Engineer for approval before any erection works commence.

b) <u>Steel and Copper Pipes and Tubes</u>

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

An approximate guide to the maximum permissible supports spacing in metres for steel and copper pipe and tube is given in the following table for horizontal runs.

Size Nominal Bores	Copper Tube to B.S. 659	Steel Tube to B.S. 1387
15mm	1.25m	2.0m
20mm	2.0m	2.5m
25mm	2.0m	2.5m
32mm	2.5m	3.0m
40mm	2.5m	3.0m
50mm	2.5m	3.0m
65mm	3.0m	3.5m
80mm	3.0m	3.5m
100mm	3.0m	4.0m
125mm	3.0m	4.5m
150mm	3.5m	4.5m

The support spacing for vertical runs shall not exceed one and a half times the distances given for horizontal runs.

c) Expansion Joints and Anchors

Where practicable, cold pipework systems shall be arranged with sufficient bends and changes of direction to absorb pipe expansion providing that the pipe stresses are contained within the working limits prescribed in the relevant B.S. specification.

Where piping anchors are supplied, they shall be fixed to the main structure only. Details of all anchor design proposals shall be submitted to the Engineer for approval before erection commences.

The Sub-contractor when arranging his piping shall ensure that no expansion movements are transmitted directly to connections and flanges on pumps or other items of plant.

The Sub-contractor shall supply flexible joints to prevent vibrations and other movements being transmitted from pumps to piping systems or vice versa.

3.2.5 **Sanitary Appliances**

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

3.2.6 Pipe Sleeves

Main runs of pipework are to be fitted with sleeves where they pass through walls and floors. Generally the sleeves shall be of P.V.C. except where they pass through the structure, where they shall be mild steel. The sleeves shall have 6mm – 12mm clearance all around the pipe or for insulated pipework all around the installation. The sleeve will then be packed with slag wool or similar.

3.3 **INSTALLATION**

3.3.1 General

Installation of all pipework, valves, fittings and equipment shall be carried out under adequate supervision from skilled staff to the relevant codes and standards as specified herein. The Sub-contractor shall be responsible to the Main Contractor for ensuring that all builders work associated with his piping installation is carried out in a satisfactory manner to the approval of the Engineer.

3.3.2 **Above Ground Installation**

a) Water Services

Before any joint is made, the pipes shall be hung in their supports and adjusted to ensure that the joining faces are parallel and any falls which shall be required are achieved without springing the pipe.

Where falls are not shown on the Contract Drawings or stated elsewhere in the Specification, pipework shall be installed parallel to the lines of the buildings and as close to the walls, ceilings, columns, etc., as is practicable.

All water systems shall be provided with sufficient drain points and automatic air vents to enable them to function correctly.

Valves and other user equipment shall be installed with adequate access for operation and maintenance. Where valves and other operational equipment are unavoidably installed beyond normal reach or in such position as to be difficult to reach from a small step ladder, extension spindles with floor or wall pedestals shall be provided.

Screwed piping shall be installed with sufficient number of unions to facilitate easy removal of valves and fittings, and to enable alterations of pipework to be carried out without the need to cut the pipe.

Full allowances shall be made for the expansion and contraction of pipework, precautions being taken to ensure that any force produced by the pipe movements are not transmitted to valves, equipment or plant. All screwed joints to piping and fittings shall be made with P.T.F.E. tape.

The test pressure shall be maintained by the pump for about one hour and if there is any leakage, it shall be measured by the quantity of water pumped into the main in that time. A general leakage of 4.5 litres per 25mm of diameter, per 1.6 kilometres per 24 hours per 30 metres head, may be considered reasonable but any visible individual leak shall be repaired.

b) Sanitary Services

Soil, waste and vent pipe system shall be installed in accordance with the best standard of modern practice as described in B.S. 5572 to the approval of the Engineer.

The Sub-contractor shall be responsible for ensuring that all ground waste fittings are discharged to a gully trap before passing to the sewer via a manhole.

The Sub-contractor shall provide all necessary rodding and inspection facilities within the draining system in positions where easy accessibility is available.

Where a branch requires rodding facilities in a position to which normal access is unobtainable, then that branch shall be extended so as to provide a suitable purpose made rodding eye in the nearest adjacent wall or floor to which easy access is available.

The vent stacks shall terminate above roof level and where stack passes through roof, a weather skirt shall be provided. The Sub-contractor shall be responsible for sealing the roof after installation of the stacks.

The open end of each stack shall be fitted with a plastic coated or galvanised steel wire guard.

Access for rodding and testing shall be provided at the foot of each stack.

c) <u>Sanitary Appliances</u>

All sanitary appliances associated with the Sub-contract works shall be installed in accordance with the best standard of modern practice as described in C.P. 305 to the approval of the Engineer.

1.1. TESTING AND INSPECTION

3.4.1 <u>Site Tests – Pipework Systems</u>

a) Above Ground Internal Water Services Installation

All water service pipe system installed above ground shall be tested hydraulically for a period of one hour to not less than one and half times to design working pressure.

If preferred, the Sub-contractor may test the pipelines in sections. Any such section found to be satisfactory need not be the subject of a further test when system has been completed, unless specifically requested by the Engineer.

During the test, each branch and joint shall be examined carefully for leaks and any defects revealed shall be made good by the Sub-contractor and the section re-tested.

The Sub-contractor shall take all necessary precautions to prevent damage occurring to special valves and fittings during the tests. Any item damaged shall be repaired or replaced at the Sub-contractor's expenses.

b) Above Ground Soil Waste and Ventilation System

All soil, waste and ventilating pipe system forming part of the above ground installation, shall be given appropriate test procedures as described in B.S. 5572, 1972.

Smoke tests on above ground soil, waste and ventilating pipe system shall not be permitted.

Pressure tests shall be carried out before any work which is to be concealed is finally enclosed.

In all respects, tests shall comply with the requirements of B.S. 5572.

3.4.2 Site Test – Performance

Following satisfactory pressure test on the pipework system operational tests shall be carried out in accordance with the relevant B. S. Code of practice on the systems as a whole to establish that special valves, gauges, control, fittings, equipment and plant are functioning correctly to the satisfaction of the Engineer.

All hot water pipework shall be installed with pre-formed fibre glass lagging to a thickness of 25mm where the pipe runs above a false ceiling or in areas where the ambient temperature is higher than normal with the result that pipe "sweating", due to condensation will cause nuisance.

All lagged pipes which run in a visible position after erection shall be given a canvas cover and prepared for painting as follows:

- i) Apply a coating of suitable filler until the canvas weave disappears and allow to dry.
- ii) Apply two coats of an approved paint and finish in suitable gloss enamel to colors approved by the Engineer.

All lagging for cold and hot water pipes erected in crawlways, ducts and above false ceiling which after erection are not visible from the corridors of rooms, shall be covered with a reinforced aluminium foil finish banded in colours to be approved by the Engineer.

In all respects, unless otherwise stated, the hot and cold water installation shall be carried out in accordance with the best standard of modern practice and described in C.P.342 and C.P.310 respectively to the approval of the Engineer.

The test pressure shall be applied by means of a manually operated test pump or, in the case of long main or mains of large diameter, by a power driven test pump which shall not be left unattended. In either case precaution shall be taken to ensure that the required pressure is not exceeded.

Pressure gauges should be recalibrated before the tests.

The Sub-contractor shall be deemed to have included in his price for all test pumps, and other equipment required under this specification.

The test pressure shall be one and a half times the maximum working pressure except where a pipe is manufactured from a material for which the relevant B.S. specification designates a maximum test pressure.

3.5 **STERILISATION OF COLD WATER SYSTEM**

All water distribution system shall be thoroughly sterilised and flushed out after the completion of all tests and before being fully commissioned for handover.

The sterilisation procedures shall be carried out by the Sub-contractor in accordance with the requirements of B.S. Code of Practice 301, Clause 409 and to the approval of the Engineer.

PART F

PARTICULAR SPECIFICATION FOR PORTABLE FIRE EXTINGUISHER BOOSTED HOSE REEL SYSTEM, HOSE REEL, AND FIRE HYDRANT INSTALLATIONS

PART F

PARTICULAR SPECIFICATION FOR PORTABLE FIRE EXTINGUISHER BOOSTED HOSE REEL SYSTEM, HOSE REEL, AND FIRE HYDRANT INSTALLATIONS

CLAUSE No.	DESCRIPTION	PAGE
4.1	General	F-1
4.2	Scope of Works	F-1
4.3	Water/Co ₂ Extinguishers	F-1
4.4	Portable Carbon Dioxide Fire Extinguishers	F-1
4.5	Dry Chemical Powder Fire Extinguishers	F-2
4.6	Air Foam Fire Extinguishers	F-3
4.7	Fire Blanket	F-3
4.8	Boosted Hose Reel System	F-3 to F-6

PART F

PARTICULAR SPECIFICATIONS FOR PORTABLE FIRE EXTINGUISHER AND HOSE REEL INSTALLATIONS

4.1 GENERAL

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

If in the opinion of the Sub-contractor there is a difference between the requirements of the Specifications and the Contract Drawings, he shall clarify these differences with the Engineer before tendering.

4.2 **SCOPE OF WORKS**

The Sub-contractor shall supply, deliver, erect, test and commission all the portable fire extinguishers and Hose Reel which are called for in these Specifications and as shown on the Contract Drawings.

4.3 WATER/CO2 EXTINGUISHERS

These shall be 9-litre water filled CO2 cartridge operated portable fire extinguishers and shall comply with B.S. 1382: 1948 and to the requirements of B.S.4523: 1977. Unless manufactured with stainless steel, bodies shall have all internal surfaces completely coated with either a lead tin, lead alloy or zinc applied by hot dipping. There shall be no visibly uncoated areas.

The extinguishers shall be clearly marked with the following:

- a) Method of operation.
- b) The words 'WATER TYPE' (GAS PRESSURE) in prominent letters.
- c) Name and address of the manufacturer or responsible vendor.
- d) The nominal charge of the liquid in imperial gallons and litres.
- e) The liquid level to which the extinguisher is to be charged.
- f) The year of manufacture.
- g) A declaration to the effect that the extinguisher has been tested to a pressure of 24.1 bar (350 psi.).
- h) The number of British Standard 'B.S' 1382 or B.S. 5423: 1977.

4.4 PORTABLE CARBON DIOXIDE FIRE EXTINGUISHERS

These shall be portable carbon dioxide fire extinguishers and shall comply with B.S. 3326: 1960 and B.S. 5423: 1977.

The body of extinguisher shall be a seamless steel cylinder manufactured to one of the following British Standards; B.S. 401 or B.S. 1288.

The filling ratio shall comply with B.S. 5355 with valves fittings for compressed gas cylinders to B.S.341. Where a hose is fitted it shall be flexible and have a minimum working pressure of 206.85 bar (3000 p.s.i.). The hose is not to be under internal pressure until the extinguisher is operated.

The nozzle shall be manufactured of brass gunmetal, aluminium or stainless steel and may be fitted with a suitable valve for temporarily stopping the discharge if such means are not incorporated in the operating head.

The discharge horn shall be designed and constructed so as to direct the discharge and limit the entrainment of air. It shall be constructed of electrically non-conductive material.

The following markings shall be applied to the extinguishers:-

- a) The words "Carbon Dioxide Fire Extinguisher" and to include the appropriate nominal gas content.
- b) Method of operation.
- c) The words "Re-charge immediately after use".
- d) Instructions for periodic checking.
- e) The number of the British Standard B.S. 3326: 1960 or B.S. 5423.
- f) The manufacturers name or identification markings

4.5 DRY CHEMICAL POWDER PORTABLE FIRE EXTINGUISHER

The portable dry powder fire extinguishers shall comply with BS3465: 1962 and BS 5423. The body shall be constructed to steel not less than the requirements of BS 1449 or aluminium to BS 1470: 1972 and shall be suitably protected against corrosion.

The dry powder charge shall be not-toxic and retain it s free flowing properties under normal storage conditions. Any pressurizing agent used as an expellant shall be in dry state; in particular compressed air.

The discharge tube and gas tube if either is fitted shall be made of steel, brass, copper or other not less suitable material. Where a hose is provided it shall not exceed 1,060mm and shall be acid and alkali resistant. Provision shall be made for securing the nozzle when not in use.

The extinguisher shall be clearly marked with the following information

- a) The word "Dry Powder Fire Extinguisher"
- b) Method of operation in prominent letters.
- c) The working pressure and the weight of the powder charge in Kilogramme.
- d) Manufacturers name or identification mark
- e) The words "RECHARGE AFTER USE" if rechargeable type.
- f) Instructions to regularly check the weight of the pressure container (gas Cartridge) or inspect the pressure indicator on stored pressure types when fitted, and remedy any loss indicated by either.
- g) The year of manufacture.
- h) The Pressure to which the extinguisher was tested.
- i) The number of this British Standard BS 3465 or BS 5423: 1977.

When appropriate complete instructions for charging the extinguisher shall be clearly marked on the extinguisher or otherwise be supplied with the refill.

4.6 AIR FOAM FIRE EXTINGUISHER

These shall be of 9 litres capacity complete with refills cartridges and wall fixing brackets and complying with B.S. 5423 with the following specifications:-

Cylinder: to B.S. 1449

Necking: to be 76mm outside diameter steel EN 3A 2³/₄ X 8TPI female thread.

Head cap: to be plastic moulding acetyl resin.

CO₂ Cylinder: to be 75gm P.V.C coated.

Internal Finish: to be polythene lining on phosphate coating.

External finish: to be phosphated - One coat primer paint and one coat stove enamel B.S. 381 C.

4.7 FIRE BLANKET

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

4.8 BOOSTED HOSE REEL SYSTEM

4.8.1 General

The Particular Specification details the requirements for the supply, installation and commissioning of the hose reel installation. The hose reel installation shall comply in all respects to the requirements set out in C.O.P 5306 Part 1: 1976, B.S 5041 and B.S 5274. The System shall comprise of a pumped system.

4.8.2 Hose Reel Pumps

The fire hose reel pumps shall consist of a duplicate set of multi-line centrifugal pumps from approved manufacturers. The pumps shall be capable of delivering 0.76 lit/sec at a running pressure of 2 bars.

The pump casing shall be of cast iron construction with the impeller shaft of stainless steel with mechanical seal.

4.8.3 Control Panel

The control panel shall be constructed of mild steel 1.0mm thick sheet, be moisture, insect and rodent proof and shall be provided complete with circuit breakers and a wiring diagram enclosed in plastic laminate.

The pump shall be controlled by a flow switch therefore, the control panel shall include the following facilities:

- (a) 'On' push button for setting the control panel to live.
- (b) Green indicator light for indicating control panel live.

- (c) Duty / Stand-by pump auto change over.
- (d) Duty pump run green indicator light.
- (e) Stand-by pump run green indicator light.
- (f) Duty pump fail red indicator light.
- (g) Stand-by pump fail red indicator light.
- (h) Low water condition pump cut-out with red indicator light.

The pumps are to be protected by a low level cut-out switch to prevent dry pump run when low level water conditions occur in the water storage tank.

4.8.4 Hose Reel

The hose reel to the installation shall consist of a recessed, swing-type hose reel as Angus Fire Armour Model III or from other approved manufacturers.

The hose reel shall comply with B.S. 5274: 1975 and B.S 3161: 1970 and is to be installed to the requirements of C.P. 5306 Part 1: 1976.

The hose reel shall be supplied and installed complete with a first-aid Non-kinking hose 30 meters long with a nylon spray / jet / shut-off nozzle fitted. A screw down chrome - plated globe valve to B.S 1010 to the inlet to the reel is to be supplied.

The orifice to the nozzle is to be not less than 4.8mm to maintain a minimum flow of 0.4 lit / sec to jet.

The hose reels shall be installed complete with electro-galvanised cabinet recessed on the wall.

The hose reels shall be installed at 1.5 metres centre above the finished floor level in locations shown in the contract drawings.

4.8.5 Pipe Work

The pipe work for the hose reel installation shall be galvanised wrought steel tubing heavy grade Class C to B.S 1387: 1967 with pipe threads to B.S 21. The pipe work and all associated fittings shall be in approved colour for fire fittings.

4.8.6 Pipe Fittings

The pipe fittings shall be wrought steel pipe fittings, welded or seamless fittings conforming to B.S. 1740 or malleable iron fittings to B.S 143.

All changes in direction will be with standard bends or long radius fittings. No elbows will be provided.

4.8.7 Non-return Valves

The non-return valves up to and including 80mm diameter shall be to B.S. 5153: 1974. The valves shall be of cast iron construction with gunmetal seat and bronze hinge pin.

4.8.8 Gate Valves

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

4.8.9 Sleeves

Where pipe work passes through walls, floors or ceilings, a sleeve shall be provided one diameter larger than the diameter of the pipe, the space between them to be packed with mineral wool, to the Engineer's approval.

4.8.10 Earthing

The hose reel installation shall be electrically earthed by a direct earth connection. The installation of the earthing shall be carried out by the Electrical Sub- contractor.

4.8.11 Finish Painting

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

4.8.12 Testing and Commissioning

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

4.8.13 <u>Instruction Period</u>

The Sub-contractor shall allow in his contract sum for instructing of the use of the equipment to the Client's maintenance staff. The period of instruction may be within the contract period but may also be required after the contract period has expired.

The period of time required shall be stipulated by the Client but will not exceed two days in which time the Client's staff shall be instructed on the operation and maintenance of the equipment.

4.8.14 Signage-Fire Instruction / Fire Exit

4.8.14.1 Fire Instruction Notice

Print fire instruction on the Perspex plates with White Colour Background measuring 510mm length x 380mm width x 4mm thick as follows;

FIRE INSTRUCTION NOTICE

In the event of fire;

- 1. Raise the alarm by actuating the nearest alarm system point, Sound Siren /gong or **Shout Fire**
- 2. Attack fire using the nearest available equipment
- 3. Call nearest fire Brigade or Police 999 and inform your switchboard (PABX) Operator
- 4. Ensure that all personnel not involved in fire fighting evacuation to safety outside the building.
- 5. Close but **DO NOT LOCK** doors behind as you leave.
- 6. Evacuate the building using stairs or fire escapes. Do not use Lifts/Escalators. Walk calmly. Avoid panic. Do not stop or return for personal belongings.
- 7. Assemble as per floor outside the building for roll call.

4.8.14.2Fire Exit Sign

Print Fire Exit signs on the Perspex plate, 4mm thick, with white colour background as follows:-

- 1. Lettering IN RED COLOUR of not less than 50mm in height.
- 2. A pendant sign bearing words, FIRE EXIT and with a directional arrow.

The sign must be capable of being read from both approaches to exit and so is double sided.

4.8.14.3 Hose Reel Label

Print Fire Exit signs on the Perspex plate, 4mm thick, with white colour background as follows:-

- 1. Lettering IN RED COLOUR of not less than 50mm in height.
- 2. A pendant sign bearing words, HOSE REEL and with a directional arrow.

The sign must be capable of being read from both approaches to exit and so is double sided.

SECTION G:

SPECIFICATION FOR PIPES AND ASSOCIATED ACCESSOIRES

SECTION G:

GENERAL SPECIFICATION FOR PIPES AND ASSOCIATED ACCESSOIRES

Polypropylene Pipes –Random copolymer (PP-R) Type 3

PP-R pipework shall be manufactured in accordance with ISO 15874-1 or manufactured in accordance with DIN 8077 and DIN 8078.

Jointing

The method of jointing to be employed shall be that of fusion welding using the pipe and manufacturer's approved equipment.

And fittings to be in accordance DIN 16962.

The threaded connections shall conform to BS EN 10226-1 or ISO 7-1.

Dimensions and quality of PP-R Pipes shall be as follows:

Nominal Diameter	Approx. Wa	Inner Diameter (mm)				
	SDR	7.4	SI	OR 6	SDR 7.4	SDR 6
	PN	16	PI	N 20	PN 16	PN 20
DN (OD)	Min	Max	Min	Max]	
20	2.80	3.30	3.40	4.00	13.90	12.60
25	3.50	4.10	4.20	4.90	17.40	15.90
32	4.40	5.10	5.40	6.20	22.50	20.40
40	5.50	6.30	6.70	7.60	28.20	25.70
50	6.90	7.80	8.30	9.40	35.30	32.30
63	8.60	9.70	10.50	11.80	44.70	40.70
75	10.30	11.60	12.50	14.00	53.10	48.50
90	12.30	13.80	15.00	16.70	63.90	58.30
110	15.10	16.90	18.30	20.40	78.00	71.30
125	17.10	19.10	20.80	23.10	88.80	81.10
140	19.20	21.40	23.30	25.90	99.40	90.80
160	21.90	24.30	26.60	29.50	113.80	103.90

Fusion guideline shall be as follows:

Pipe Diameter(mm)	Minimum wall thickness (mm)	Insert depth (mm)	Heating time (sec)	Jointing time (sec)	Cooling time (sec)
20	3, 4	14	6	4	2
25	4, 2	16	7	4	3
32	5, 4	18	8	6	4
40	6, 7	20	12	6	4
50	8, 4	23	18	6	5
63	10, 5	26	25	8	6
75	12, 5	28	30	8	8
90	15, 0	31	40	10	8
110	18, 4	33	50	10	8

Galvanised Mild Steel Pipe Work and Associated Accessories

Galvanized steel pipework up to 65mm nominal bore shall be manufactured in accordance with KS 06.366, EN 10255, Class B/Medium, with tapered pipe threads in accordance with BS EN 10226-1 or ISO 7-1.

All fittings shall be made of galvanised malleable iron and manufactured in accordance with KS 06-885:1995 or EN 10255.

Galvanized steel pipe work from 80mm nominal bore up to 150mm nominal bore shall be manufactured to comply in all respects with the specification for 65mm pipe, except that screwed and bolted flanges shall replace unions and couplings for the jointing of pipes to valves and other items of plant.

Specifications for galvanized mild steel pipe work to be as follows:

		Outside diameter	Thic	kness	Ma	ss
Nomin	al bore	Medium/ Heavy	Medium	Heavy	Medium	Heavy
in	mm	mm	mm	mm	kg/m	kg/m
1/4	8	13.90	2.30	2.90	0.641	0.765
3/8	10	17.40	2.30	2.90	0.839	1.020
1/2	15	21.70	2.60	3.20	1.210	1.440
3/4	20	27.20	2.60	3.20	1.560	1.870
1	25	34.20	3.20	4.00	2.410	2.940
1 1/4	32	42.90	3.20	4.00	3.100	3.800
1 1/2	40	48.80	3.20	4.00	3.570	4.380
2	50	60.80	3.60	4.50	5.030	6.190
2 1/2	65	76.60	3.60	4.50	6.430	7.930
3	80	89.50	4.00	5.00	8.370	10.300
4	100	114.90	4.50	5.40	12.200	14.500
5	125	140.60	5.00	5.40	16.600	17.900
6	150	166.10	5.00	5.40	19.700	21.300

Poly-vinyl Chloride (CPVC) Pipes and Fittings

All CPVC pressure pipes and fittings shall be as manufactured in accordance with ASTM F 441/F441M or DIN 8079/8080 or EN ISO 15877, KS06-478-2:1993 (B.S. 3505: 1968).

Jointing

The method of jointing to be employed shall be that of solvent welding, using the pipe and manufacturer's approved cement. Seal ring joint shall be introduced where it is necessary to accommodate thermal expansion. This shall be in accordance to ASTM F438 and ASTMF439

The threaded connections shall conform to ASTM F437 or BS EN 10226-1 or ISO 7-1.

The specification for chlorinated polyvinyl chloride (CPVC) pipe made for water distribution shall be as follows:

ASTM F441/F441M

Nominal Size		Outside er (mm)	WALL THICKNESS			`	1) & PR SI)	ESSUR	E RATI	NG
				Sched	ule 40			Sched	ule 80	
inch	Min	Max	Min	Max	P	SI	Min	Max	P	SI
					23°C	82°C			23°C	82°C
1/2	21.20	21.20	2.77	3.28	600	150	3.73	4.24	850	210
3/4	26.60	26.60	2.87	3.28	480	120	3.91	4.42	690	170
1	33.27	33.27	3.38	3.89	450	110	4.55	5.08	630	155
11/4	42.07	42.07	3.56	4.06	370	90	4.85	5.44	520	130
11/2	48.15	48.15	3.68	4.19	330	80	5.08	5.69	470	155
2	60.15	60.15	3.91	4.42	280	70	5.54	6.20	400	100
21/2	72.82	72.82	5.91	5.77	300	75	7.01	7.85	420	105
3	88.70	88.70	5.49	6.15	260	65	7.85	8.53	370	90
4	114.07	114.07	6.02	6.73	220	55	8.56	9.58	320	80
6	168.02	168.02	7.11	7.97	180	45	10.97	12.29	280	70
8	218.62	218.62	8.18	9.17	160	40	12.7	14.22	250	60

DIN 8079/8080

Nominal Size		Outside ter (mm)	WALI	THICKNESS RATIN	G (MM) & PRE G (BAR)	SSURE
			SD	R 13.6	SDR	11
mm	Min	Max	(16 Ba	ır)/PN 16	(20 Bar)	/PN 20
			Min	Max	Min	Max
20	20.0	20.2	1.5	1.9	1.9	2.3
25	25.0	54.2	1.9	2.3	2.3	2.8
32	32.0	32.2	2.4	2.9	2.9	3.4
40	40.0	40.2	3.0	3.5	3.7	4.3
50	50.0	50.2	3.7	4.3	4.6	5.3
63	63.0	63.2	4.7	5.4	5.8	6.6
75	75.0	75.3	5.6	6.4	6.8	7.7
90	90.0	90.3	6.7	7.6	8.2	9.3
110	110.0	110.3	8.1	9.2	10.0	11.2
125	125.0	125.3	9.2	10.4	11.4	12.8
140	140.0	140.4	10.3	11.6	12.7	14.2
160	160.0	160.4	11.8	13.2	14.6	16.3

The pipe to be made out high quality material with high impact resistance, chemical resistance, good thermal qualities, low flame spread and low smoke generation.

SECTION H:

BILLS OF QUANTITIES

AND

SCHEDULE OF UNIT RATES

SECTION H:

BILLS OF QUANTITIES AND SCHEDULE OF UNIT RATES

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5.03	BILLS OF QUANTITIES	H-3 to H-30
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5.01 SPECIAL NOTES

- 1. The Bills of Quantities form part of the contract documents and are to be read in conjunction with the contract drawings and general specifications of materials and works.
- 2. The prices quoted shall be deemed to include for all obligations under the sub-contract including but not limited to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning and all taxes (including 16% VAT).
 - In accordance with Government policy, 3% Withholding Tax shall be deducted from all payments made to the Tenderer, and the same shall be forwarded to the Kenya Revenue Authority (KRA).
- 3. All prices omitted from any item, section or part of the Bills of Quantities shall be deemed to have been included to another item, section or part there of.
- 4. The brief descriptions of the items given in the Bills of Quantities are for the purpose of establishing a standard to which the sub-contractor shall adhere. Otherwise alternative brands of **equal** and **approved** quality will be accepted.
 - Should the sub-contractor install any material not specified here in before receiving written approval from the Project Manager, the sub-contractor shall remove the material in question and, at his own cost, install the proper material.
- 5. The grand total of prices in the price summary page must be carried forward to the **Form of Tender for** the tender to be deemed valid.

Tenderers must enclose, together with their submitted tenders, detailed manufacturer's Brochures detailing Technical Literature and specifications on all the equipment they intend to offer.

STATEMENT OF COMPLIANCE 5.02

a)

a)	I confirm compliance of all clauses of the General Conditions, General Specifications 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	l Rubber Stamp:

5.03 BILLS OF QUANTITIES

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 number of preliminary items to be priced by the Tenderer has 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. Installation Items – Other Bills

- 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. 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 document

BILL No. 1 PRELIMINARIES

ITE M	DESCRIPTION	QTY	UNIT	RATE	KSHS
1	Discrepancies clause 1.02				
2	Conditions of sub-contract Agreement clause 1.03				
3	Payments clause1.04				
4	Site location clause 1.06				
5	Scope of Contract Works clause 1.08				
6	Extent of the Contractor's Duties clause 1.09				
7	Firm price contract clause 1.12				
8	Variation clause 1.13				
9	Prime cost and provisional sum clause 1.14 (insert profit and attendance which is a percentage of expended PC or provisional sum.)				
10	Bond clause 1.15				
11	Government Legislation and Regulations clause 1.16				
12	Import Duty and Value Added Tax clause 1.17 (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 1.18				
14	Provision of services by the Main contractor clause 1.19				
15	Samples and Materials Generally clause 1.21				
SUB-T	OTAL CARRIED TO PAGE		Н -6	1	

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS		
16	Supplies clause 1.20						
17	Bills of Quantities clause 1.23						
18	Contractor's Office in Kenya clause 1.24						
19	Builder's Work clause 1.25						
20	Setting to work and Regulating system clause 1.29						
21	Identification of plant components clause 1.30						
22	Working Drawings clause 1.32						
23	Record Drawings (As Installed) and Instructions clause 1.33						
24	Maintenance Manual clause 1.34						
25	Hand over clause 1.35						
26	Painting clause 1.36						
27	Testing and Inspection – manufactured plant clause 1.38						
28	Testing and Inspection – Installation clause 1.39						
29	Storage of Materials clause 1.41						
30	Initial Maintenance clause 1.42						
SUB-TO	SUB-TOTAL CARRIED TO PAGE						

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
31	Attendance Upon Tradesmen, etc. (Insert percentage only) clause 1.58				
32	Local and other Authorities notices and fees clause 1.60				
33	Temporary Works clause 1.63				
34	Patent Rights clause 1.64				
35	Mobilization and Demobilization Clause 1.65				
36	Extended Preliminaries Clause 1.66(see appendix on page C- 17)				
37	Supervision by Engineer and Site Meetings Clause 1.67	1	Item	600,000	600,000.00
38	Allow for profit and Attendance for the above				
39	Sum for Clerk of Works on site				
40	Amendment to Scope of Sub-contract Works Clause 1.68				
41	Contractor Obligation and Employers Obligation clause 1.69(see appendix page C- 18)				
42	Any other preliminaries; Any other preliminaries; 1. a sum for project stationery to be provided to the Chief Engineer [Mechanical (BS)] through the project engineer once the contract is signed 2.	1	Item	200,000	200,000.00
	Subtotal above				
	Sub-total brought forward from page H-4				
	Sub-total brought forward from page				

Bill No 1:Sanitary Fittings					
ltem	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	SANITARY APPLIANCES				
	Supply, deliver, install, test and commission the following sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.				
	(i) All sanitary fittings shall be in approved colour.				
	(ii) The Model and Ref No. indicated is only a guide to the type and quality of fittings.				
	(iii) Equal models may be acceptable.				
	Water Closet (WC) Flush Valve				
Α	a 11/2" (40mm) toilet flush valve of a concealed back entry type, chrome plated, rough brass with integral vacuum breaker, non-return valve and control stop, with pushfork and chrome plated push button assembly comprising the following elements: 1No. flush valve brass coated, 1No. pushbutton assembly chrome plated, 1No. elbow, 2No. straight flush pipe of diameter 38.3mm and height of 445mm and 1 No.rubber flush pipe connector as "Cobra Watertech Model FM 3.402.	13	No.		
	Water Closet Pan				
В	Back to wall floor mounted water closet pan comprising: a wite raised seating water closet with a fully shrouded & rimless to aid in easy cleaning to include a seat ring with metal top fix hinges (white), a seat & cover with metal top hinges (white), the WC outlet connector to be of "S" trap, as for fixing (to be screwed to floor with provided fixings and be that it can be sealed to wall floor using silicone building sealant) and of preferred dimensions 750mm from wall and 360mm wide with a floor to top of pan height of 480mm	6	No.		
	Water Closet (WC) Pan				
С	White vitreous china squating pan as "Twyford" Nile Squating pan with horizontal outlet, fixing screws and mastic.	7	No.		
	Arabian Shower/ Bidet spray				
D	Chrome plated wall mounted arabian shower with the following features: - Heavy duty chrome plated flexible hose - Spray rose with press lever operation - Chrome plated mounting bracket for the spray rose above	13	No.		
	Sub Total 1 Carried Forward to Collection P	aae H	l-10		

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Countertop Wash Hand Basin				
Α	White countertop ceramic wash hand basin with single centre taphole. Prefered dimension: 600 x 350mm x 200mm. Basin to be as " Duravit ", " D-Code " or equal. Other accessories to include; chrome plated waste pop-up, bottle trap and drainage fitments.	22	No.		
	Toilet Roll Holder				
В	Fully recessed toilet roll holder in Vitreous China of size 165 x 165mm in approved colour as Twyfords or equal.	13	No.		
	Shower Mixer				
С	Concealed shower fitting consisting of 15mm chrome plated riser pipe to connect the concealed three way diverter single lever shower mixer as of tapis or equal for hot and cold water to a 200mm shower rose as tapis or equal, shower arm ,shower tap and other necessary fittings and accessories. All to be as tapis or equal.	4	No.		
	Towel Rail				
D	Chrome plated towel rail 600mm long with the rail and brackets as one piece. To be as GROHE "Atrio Accessories Tier:G5 Prestige" model 40 309" or equal.	4	No.		
	Soap Dish				
Е	Chrome plated single soap dish as DALI MT51 or equal.	4	No.		
	Bathroom Tap				
F	15mm diameter chrome plated back inlet bib tap Cobra ref 107EC CP	4	No		
	Toilet Brush and Holder				
G	Wall mounted toilet brush holder and brush of approved colour as GROHE "Atrio accessories Tier:G5 Prestige" Model- 40 314 toilet brush set or equal.	13	No.		
	Mirror				
Н	6mm thick polished plate glass silver backed mirror with bevelled edges, size 610 x 610mm, Plugged and screwed to wall with 4No. chrome plated dome capped screws. The mirror shall rest against a layer of 5mm thick foam.	22	No.		
	Sub Total 2 Carried Forward to Collection P				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Urinal Bowls				
Α	Ceramic urinal bowl complete with 40mm heavy duty plastic bottle trap and 40mm diameter chrome plated outlet with grating firmly fixed on the wall with chrome plated screws. The fittings shall be as Roca or equal.	6	No.		
	Urinal Bowl Divisions				
В	Ceramic urinal bowl divisions separating the above described urinal bowls fixed firmly on the wall. The fittings shall be as Roca or equal.	4	No.		
	Urinal Bowl Flush Valves				
С	32mm urinal bowl flush valve for the above urinal bowls complete with, back entry with integral vacuum breaker, non-hold-open features and non-return valve, inlet control stop and wall plate comprising flush valve, bent chrome plated flush pipe and rubber pipe connector. The flush valve to be push button type. The fittings shall be as 'Docol' or equal.	6	No.		
	Soap Dispenser				
D	Wall mounted soap dispenser with a capacity of about one litre having a press action soap release mechanism complete with fixing screws. Allow for initial soap supply. To be as Mediclinic or approved equivalent.	6	No.		
	Hand Driers				
Е	Automatic hand drier in white colour, operating on an infra-red automatic sensing system with heating element safety cut-out complete with a 30 seconds safety timer, plastic rawl plugs and fixing screws. The hand drier to have a heating capacity of 2.1kw and performance flow rate of 135cfm (3.82m3/min) and to be of size 270x264x143mm deep It shall have a noise level below 72.5 dBA at 1.5m. It shall be as Medclinic or approved equivalent.	6	No.		
	Cleaner Sink				
F	Heavy duty sink size 465 x 410 x 285mm deep in enamelled fireclay complete with hardwood pad on the front edge and fitted bucket stainless steel grating and 20mm chrome plated wall mounted inclined bricon tap, chrome plate chain and rubber stopper and heavy gauge 40mmn chrome plated bottle trap, stainless steel legs and bearers and 40mm grid waste fitting. All as Twyfords "cleaners sink" or approved equivalent.	1	No.		
	Sub Total 3 Carried Forward to Collection P	age H	I-10		

COLLECTION PAGE

Item	Description	Amount (Kshs)
1	Sub Total 1 carried forward from page H-7	
2	Sub Total 2 carried forward from page H-8	
3	Sub Total 3 carried forward from page H-9	
	Total 1 Carried Forward to Summary Page H-31	

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
Α	Facility for the Physically challenged				
	Disabled Facility comprising of: a. Water Closet Suite				
	Ergonomically designed modern rimless design water closet for disabled persons, WC pan with horizontal outlet complete with;				
	> Avalon 700mm projection BTW rimfree pan concealed cistern single flush lever of a 4 litre flush avalon 50mm extension for WC cistern and fittings. The suite to be supplied complete with valveless fittings including siphon, 15mm side inlet ball valve, 20mm side overflow, plastic flush bend inlet connection and reversible chrome plated cistern lever and cistern supports				
	> Avalon seat ring stanless steel hinge with suitable buffers Doc M back support with cushion hand rinse.				
	> A hand rinse - 1 tap hole medical basin, no over flow "Sola thermostatic monobloc mixer lever tap (SF!1054CP).				
	> Grid waste wall bolts (pair) and the following 5 Doc. M support rails Doc. M hinged support rail and toilet roll holder				
	b. Wash Hand Basin				
	Wash Hand Basin as " Twyford" Model " Sola" complete with one left hand offset tap hole and chain stay hole, chrome plated chain waste, lever action spray mixer with 8mm inlets and wall bracket,	2	Set		
	c. Support Items				
	Hinged support rail with toilet roll holder made of Nylon coated aluminium with suitable fixings for securing to solid wall.				
	d. Horizontal Grab Rail				
	600mm horizontal grab rails in nylon coated aluminium 2 in number				
	e. Vertical Grab Rail				
	600mm vertical grab rails in nylon coated aluminium 3 in Number				
	f. Mirror				
	6 mm thick polished plate glass silver backed mirror with bevelled edges, size 400mm wide by 900mm high fixed 900mm above floor.				
	Total 2 Carried Forward to Summary	Page H	-31		

	Bill No. 2:Plumbing and drainage					
Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)	
	INTERNAL PLUMBING					
	Supply, deliver and install Polypropylene Random (PP-R) 20 pipework to DIN 8077 with joints, couplings, reducers, tees, adaptors, pipe fixing clips etc all to DIN 16962 and DIN 16928. Pipe jointing shall be by polyfusion or use of electric coupling. Where pipework is not chased proper anchoring using approved fixtures shall be done. No pipework shall be left exposed to the sun. Rates must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system.					
	Pipe work-PPR PIPES PN 16					
Α	25mm nominal diameter pipework	24	Lm			
В	40mm nominal diameter pipework	30	Lm			
С	50mm nominal diameter pipework	48	Lm			
D	63mm nominal diameter pipework	12	Lm			
Е	75mm nominal diameter pipework	18	Lm			
F	90mm nominal diameter pipework	30	Lm			
G	110mm nominal diameter pipework	60	Lm			
	Bends					
Н	25mm nominnal diameter bend	10	No.			
I	40mm nominnal diameter bend	6	No.			
J	50mm nominnal diameter bend	9	No.			
K	63mm nominnal diameter bend	4	No.			
L	75mm nominnal diameter bend	6	No.			
М	90mm nominnal diameter bend	8	No.			
N	110mm nominnal diameter bend	4	No.			
_	Sub-Total 1 Carried Forward to Collection Page H	1-20				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Tees			(,	,
Α	25mm equal tee	4	No.		
В	40mm equal tee	23	No.		
С	50mm equal tee	4	No.		
D	63mm equal tee	2	No.		
Е	75mm equal tee	14	No.		
F	90mm equal tee	4	No.		
G	110mm equal tee	4	No.		
	Reducers				
Н	25 x 20mm diameter reducer	1	No.		
I	32 x 20mm diameter reducer	1	No.		
J	32 x 25mm diameter reducer	1	No.		
K	50 x 25mm diameter reducer	2	No.		
L	50 x 40mm diameter reducer	1	No.		
М	90 x 63mm diameter reducer	4	No.		
N	90 x 75mm diameter reducer	3	No.		
0	110 x 90mm diameter reducer	2	No.		
	Male/Female Adapters (Brass threaded)				
R	20mm brass threaded adapter	1	No.		
S	25mm brass threaded adapter	1	No.		
T	32mm brass threaded adapter	1	No.		
U	40mm brass threaded adapter	1	No.		
	Male/Female Bend (Brass threaded)				
Χ	20mm brass threaded bend	1	No.		
Υ	25mm brass threaded bend	1	No.		
Α	32mm brass threaded bend	1	No.		
В	40mm brass threaded bend	1	No.		
С	50mm brass threaded bend	1	No.		
D	65mm brass threaded bend	1	No.		
	Sub-Total 2 Carried Forward to Collection Page H	1-20			

Plumbing and Drainage Works

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Unions				
Α	25mm nominal diameter pipe union	4	No.		
В	40mm nominal diameter pipe union	7	No.		
С	50mm nominal diameter pipe union	12	No.		
D	63mm nominal diameter pipe union	3	No.		
Е	75mm nominal diameter pipe union	4	No.		
F	90mm nominal diameter pipe union	7	No.		
G	110mm nominal diameter pipe union	12	No.		
Sub-Total 3 Carried Forward to Collection Page H-20					

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Pipe work-PPR PIPES PN 20			,	, ,
Α	32mm nominal diameter pipework	24	Lm		
В	40mm nominal diameter pipework	30	Lm		
С	50mm nominal diameter pipework	48	Lm		
D	90mm diameter pipework	60	Lm		
	Bends				
Е	32mm nominnal diameter bend	10	No.		
F	40mm nominnal diameter bend	6	No.		
G	50mm nominnal diameter bend	9	No.		
Н	90mm nominnal diameter bend	6	No.		
	Tees				
I	32mm equal tee	4	No.		
J	40mm equal tee	15	No.		
K	50mm equal tee	4			
L	90mm equal tee	6	No.		
	Reducers				
М	25 x 20mm diameter reducer	1	No.		
N	32 x 20mm diameter reducer	1	No.		
0	50 x 32mm diameter reducer	3	No.		
Р	50 x 40mm diameter reducer	3	No.		
Q	90 x 50mm diameter reducer	6	No.		
	Male/Female Adapters (Brass threaded)				
R	32mm brass threaded adapter	0	No.		
S	40mm brass threaded adapter	0	No.		
T	50mm brass threaded adapter	0	No.		
U	90mm brass threaded adapter	0	No.		
	Sub-Total 4 Carried Forward to Collection Page H	1-20			

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Male/Female Bend (Brass threaded)				
Α	32mm brass threaded bend	0	No.		
В	40mm brass threaded bend	0	No.		
С	50mm brass threaded bend	0	No.		
D	90mm brass threaded bend	0	No.		
	Unions				
Е	32mm diameter pipe union	5	No.		
F	40mm nominal diameter pipe union	7	No.		
G	50mm diameter pipe union	12	No.		
Н	90mm diameter pipe union	15	No.		
	Flexible Tubing				
I	15mm diameter x 300mm long flexible connectors complete with integral chrome plated angle valve as Cobra or equal and approved.	24	No.		
	Threaded Brass Coupling				
J	25mm threaded brass coupling	1	No.		
K	32mm threaded brass coupling	1	No.		
L	40mm threaded brass coupling	1	No.		
М	50mm threaded brass coupling	1	No.		
Ν	65mm threaded brass coupling	1	No.		
	Valves				
0	25mm gate valve	2	No.		
Р	32mm gate valve	6	No.		
Q	40mm gate valve	3	No.		
R	50mm gate valve	6	No.		
S	63mm gate valve	3	No.		
T	75mm gate valve	5	No.		
U	90mm gate valve	2	No.		
٧	110mm gate valve	2	No.		
	Pipe Sleeves				
W	150mm diameter heavy duty PVC pipe sleeves for crossing over columns and beams.	20	Lm		
	Sub-Total 5 Carried Forward to Collection Page 1	H-20			

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	FOUL WATER INTERNAL DRAINAGE				
	Supply ,deliver and install the following UPVC, MUPVC, soil and waste systems respectively to B.S 5255 with fittings fixed to Manufactures Printed instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system.				
	MuPVC and uPVC Waste and Soil pipework				
Α	100mm diameter heavy gauge golden brown UPVC pipe	30	Lm		
В	100mm diameter heavy gauge grey mUPVC pipe	12	Lm		
С	63mm diameter waste pipe	6	Lm		
D	50mm diameter waste pipe	72	Lm		
Е	40mm diameter waste pipe	6	Lm		
F	32mm diameter waste pipe	6	Lm		
	Bends				
G	100mm diameter long radius bend	13	No.		
Н	100mm diameter short radius bend	13	No.		
I	100mm diameter bend with access	13	No.		
J	100mm diameter sweep bend	13	No.		
K	63mm diameter sweep bend	3	No.		
L	50mm diameter sweep bend	20	No.		
М	40mm diameter sweep bend	8	No.		
N	32mm diameter sweep bend	4	No.		
	Tees				
0	100mm diameter sweep tee	13	No.		
Р	63mm diameter sweep tee	3	No.		
Q	50mm diameter sweep tee	18	No.		
R	40mm diameter sweep tee	4	No.		
S	32mm diameter sweep tee	4	No.		
	Sub-Total 6 Carried Forward to Collection Page H	H-20			

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Access Caps				
Α	100mm diameter access cap	13	No.		
В	63mm diameter access cap	3	No.		
С	50mm diameter access cap	8	No.		
D	40mm diameter access cap	4	No.		
Е	32mm diameter access cap	4	No.		
	Boss Connectors				
Е	100 x 50mm diameter boss connector	13	No.		
F	100 x 40mm diameter boss connector	13	No.		
	Single Branches				
G	100mm diameter single branch	13	No.		
	WC Connectors				
Н	100mm diameter WC connector	13	No.		
	Traps				
1	100 x 50mm diameter floor trap and grating	14	No.		
	Supporting Brackets				
J	Allow for suitable supporting steel brackets for anchoring and supporting drainage pipes bends on the lower floor. To be painted to match the walling colour.	1	Item		
	Testing and Commissioning				
K	Allow for testing and commissioning of the plumbing and drainage installations to the satisfaction of the Engineer.	1	Item		
	Sub-Total 7 Carried Forward to Collection Page I	H-20			

	COMMON ITEMS				
Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
Α	Allow for a standard 300 x 300 x 450mm masonry gully trap complete with concrete cover.	6	No.		
	Manholes and Inspection Chambers				
В	Construct inspection chamber size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base (1:3:6), approved 150mm block sides rendered all around in cement and sand (1:4). It shall have an approved heavy duty cast iron cover and frame as manufactured by E.A Foundry works. Include all necessary excavations, disposal and form work. To be as manhole type 'A'.	10	No.		
	MuPVC and uPVC Waste and Soil pipework (SVP drops)				
С	100mm diameter heavy gauge golden brown UPVC pipe	1	Lm		
D	100mm diameter heavy gauge grey MUPVC pipe	1	Lm		
	Weathering Slates and Vent Cowls				
Е	100mm diameter weathering slate and apron.	2	No.		
F	100mm diameter vent cowl	2	No.		
	Supporting Brackets				
G	Allow for suitable supporting steel brackets for anchoring and supporting drainage pipes bends on the lower floor. To be painted to match the walling colour.	1	Item		
	Rainwater drainage				
Н	100mm diameter heavy gauge grey mUPVC down pipes	1	Lm		
I	100mm diameter 45 ⁰ bend	1	No.		
J	100mm diameter sweep bend	1	No.		
K	50mm diameter bend	1	No.		
L	100mm diameter tee	1	No.		
М	100mm diameter cast iron fulbora	1	No.		
	Testing and Commissioning				
Ν	Allow for testing and commissioning of the plumbing and drainage installations to the satisfaction of the Engineer.	1	Item		
	Sub-Total 8 Carried Forward to Collection Page H	H-20			

COLLECTION PAGE

Item	Description	Amount (Kshs)
1	Total carried forward from page H-12	
2	Total carried forward from page H-13	
3	Total carried forward from page H-14	
4	Total carried forward from page H-15	
5	Total carried forward from page H-16	
6	Total carried forward from page H-17	
7	Total carried forward from page H-18	
8	Total carried forward from page H-19	
	Total 3 Carried Forward Summary Page H-31	

	Bill No. 5:Plumbing and drainage in the Kitchen					
Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)	
А	1/2" lever action bib tap mixer with combination top assembly and a swivel nozzle that has a chrome plated finish. The taps to be 200mm apart and each to have a lever 170mm. The swivel to be 125mm from the wall pipe and a bend of 130mm with the tip being at a height of 145mm	41	No.			
	INTERNAL PLUMBING					
	In the kitchen the pipework shall not be chased in to the wall but anchored to the wall or floor channel at the recommended distances using approved fixtures. All shall be done as per the instructions of the engineer and architect. The tenderer shall then be given approval by the engineer to carry out the works					
	Supply and installation of Galvanised mild steel piping and fittings with screwed & socketed joint to medium grade class "B" to BS. 1387. Rates must allow for all metal threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system.					
	GMS pipe work					
В	20mm nominal diameter pipework	24	Lm			
С	25mm nominal diameter pipework	160	Lm			
D	32mm nominal diameter pipework	80	Lm			
Е	38mm nominal diameter pipework	36	Lm			
F	75mm nominal diameter pipework	120	Lm			
G	100mm nominal diameter pipework	120	Lm			
	Bends					
Н	25mm nominnal diameter bend	6	No.			
I	38mm nominnal diameter bend	6	No.			
J	50mm nominnal diameter bend	4	No.			
K	75mm nominnal diameter bend	4	No.			
L	100mm nominnal diameter bend	6	No.			
	Sub-Total 1 Carried Forward to Collection Page H	1-26				

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Tees				
Α	20mm equal tee	2	No.		
В	25mm equal tee	40	No.		
С	32mm equal tee	40	No.		
D	38mm equal tee	4	No.		
Е	75mm equal tee	14	No.		
F	100mm equal tee	4	No.		
	Reducers				
G	20 x 15mm diameter reducer	2	No.		
Н	25 x 15mm diameter reducer	40	No.		
I	32 x 15mm diameter reducer	40	No.		
J	38 x 32mm diameter reducer	4	No.		
K	75 x 38mm diameter reducer	2	No.		
L	100 x 75mm diameter reducer	2	No.		
	Male/Female Adapters (Brass threaded)				
М	20mm brass threaded adapter	1	No.		
N	25mm brass threaded adapter	1	No.		
0	32mm brass threaded adapter	1	No.		
Р	38mm brass threaded adapter	1	No.		
	Male/Female Bend (Brass threaded)				
Q	20mm brass threaded bend	1	No.		
R	25mm brass threaded bend	1	No.		
S	32mm brass threaded bend	1	No.		
T	38mm brass threaded bend	1	No.		
U	75mm brass threaded bend	1	No.		
٧	100mm brass threaded bend	1	No.		
	Sub-Total 2 Carried Forward to Collection Page H	H-26			

ltem	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Unions				
Α	20mm nominal diameter pipe union	4	No.		
В	25mm nominal diameter pipe union	30	No.		
С	32mm nominal diameter pipe union	12	No.		
D	38mm nominal diameter pipe union	12	No.		
Е	75mm nominal diameter pipe union	15	No.		
F	1000mm nominal diameter pipe union	20	No.		
	Flexible Tubing				
G	15mm diameter x 300mm long flexible connectors complete with integral chrome plated angle valve as Cobra or equal and approved.	8	No.		
	Threaded Brass Coupling				
Н	25mm threaded brass coupling	1	No.		
I	32mm threaded brass coupling	1	No.		
J	38mm threaded brass coupling	1	No.		
	Valves				
K	20mm gate valve	2	No.		
L	32mm gate valve	6	No.		
Μ	38mm gate valve	3	No.		
Ν	75mm gate valve	2	No.		
0	100mm gate valve	4	No.		
	Pipe Sleeves				
Р	150mm diameter heavy duty PVC pipe sleeves for crossing over columns and beams.	40	Lm		
	Sub-Total 3 Carried Forward to Collection Page	H-26			

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	KITCHEN WASTE WATER INTERNAL DRAINAGE				
	Supply, deliver and install the following waste systems respectively to B.S 5255 of the stainless steel pipes of push fit system with fittings fixed to Manufactures Printed instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. One such pipe is the ACO PIPES				
	Waste pipework of the push fit kind stainless steel				
Α	110mm diameter waste pipe	60	Lm		
В	50mm diameter waste pipe	6	Lm		
С	40mm diameter waste pipe	80	Lm		
	Bends				
D	110mm diameter bend at 45 degrees	24	No.		
Е	110mm diameter swept single branch bend at 87.5 degrees	4	No.		
F	50mm diameter sweep bend	12	No.		
G	40mm diameter sweep bend	80	No.		
Н	50mm diameter sweep tee	4	No.		
I	40mm diameter sweep tee	4	No.		
	Access Caps				
J	110mm diameter access cap	12	No.		
K	50mm diameter access cap	2	No.		
L	40mm diameter access cap	40	No.		
	Supporting Brackets				
М	Allow for suitable supporting steel brackets for anchoring and supporting drainage pipes bends on the floor or channel	1	Item		
	Testing and Commissioning				
Ν	Allow for testing and commissioning of the plumbing and drainage installations to the satisfaction of the Engineer.	1	Item		
	Sub-Total 4 Carried Forward to Collection Page H	1-26			

Item	COMMON ITEMS Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
A	Provide a gully stainless steel of 1.5mm thickness that is suitable for the push fit system pipework that has a horizontal outlet of top size 200 x 200 with an outlet of 110mm in diameter complete with hygienic grating, silt basket, foul air trap, foul air trap support, gully body, gully top, friction ring, and leveling feet. Grease interceptors	28	No.	(KSIIS)	(KSHS)
В	An in floor grease interceptor with a flow control and air intake with a rate of 3.16 l/s and to be installed to manufacturer's instructions that shall have been given to the engineer before the item is brought to site. The unit shall be of engineered thermoplastics to withstand temperatures of 104 degrees celsius and a lid with the capability of supporting 200kgs. it shall have latches, reinforced polypropelene cover, rubber gasket, removable polypropylene baffles, a tank and a flow control assembly with air intake. The tenderer shall provide mechanical connectors to connect the grease interceptor. the preferred dimensions are 787mm x 597 mm and a depth of 596.9mm and it shall have an outlet of 110mm that shall have its centre line at 127mm below floor finished level and 469.9mm above the base of tank	12	No.		
С	Hygienic Channel Provide a standard edge hygienice box channel that is suitable for concrete, tiles and resin floor. Made of stainless steel, fully pickled and passivated with material thickness of 1.5mm, a minimum longitudinal slope of 1%, minimum sectional slope of 5 degrees V shape bottom, rubber edge infill, rounded corners equal or larger than 3mm, hygienic gratings with slip resistance, adjustable levelling feet (60mm-110mm) and anchors for fixing in concrete. to have preferred outside dimensions of 2030mm x 200mm and an internal diameter of 2000mm x 170mm with an outlet diameter of 125mm	16	Lm		
D	Provide a standard edge hygienice box channel that is suitable for concrete, tiles and resin floor. Made of stainless steel, fully pickled and passivated with material thickness of 1.5mm, a minimum longitudinal slope of 1%, minimum sectional slope of 5 degrees V shape bottom, rubber edge infill, rounded corners equal or larger than 3mm, hygienic gratings with slip resistance, adjustable levelling feet (60mm-110mm) and anchors for fixing in concrete. to have preferred outside dimensions of 1030mm x 200mm and an internal diameter of 1000mm x 170mm with an outlet diameter of 125mm	8	Lm		

COLLECTION PAGE

Item	Description	Amount (Kshs)
1	Total carried forward from page H-21	
2	Total carried forward from page H-22	
3	Total carried forward from page H-23	
4	Total carried forward from page H-24	
5	Total carried forward from page H-25	
	Total 4 Carried Forward to Summary Page H-31	

Bill No 6: Fire Protection

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Fire Fighting				
	Supply, deliver and install the following fire fighting equipment in positions indicated on the contract drawings or as shall be instructed by the Engineer.				
	Hose Reel				
A	Swinging type hosereel fitted with 30 metres long, 20 mm diameter reinforced non-kink rubber hose with 5/6 mm lever operated shut-off nozzle, mild steel feed pipe, isolation valve, guide and all other accessories as 'Angus Fire Armour' or equal and approved.	7	No.		
	GMS Pipes				
В	25mm diameter GMS pipework	30	Lm		
С	50mm diameter GMS pipework	100	Lm		
	Extra Over Pipework				
	Bends				
D	25mm diameter bend	7	No.		
Е	50mm diameter bend	7	No.		
	Tees				
F	50mm diameter equal Tee	14	No.		
	Reducers				
G	50 x 25 mm diameter reducer	7	No.		
	Valves				
н	25mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 1952, with wheel and head joints to steel tubing. The gate valve to be as PEGLER or approved equivalent.	7	No.		
ı	50mm diameter ditto	4	No.		
	Sub-Total 1 Carried Forward to Collection Page	H-30			

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Unions				
Α	25mm diameter pipe unions	7	No.		
В	50mm diameter pipe unions	1	No.		
	Hosereel Pumpset				
С	Hose reel pumpset, one duty, the other standby mounted on a frame with a stainless steel base plate. Each pump shall have a duty 6m³/hr. against 30m head as Grundfos model or approved equivalent. In addition, there shall be a 60 litres diaphragm pressure vessel (as Varem or approved equivalent), pressure switches, a switch to protect dry run, 65mm foot valve and strainer, tank connections, gate valves and non-return valves. The pressure set to be as Dayliff SGM2/40Por equal and approved.Control shall be effected via a pressure switch through a prewired control panel which shall give automatic change-over from duty to standby pump within 5 seconds should the duty pump fail to deliver for any reason. The pumpset shall include all non-returns valves, timer, isolating valves and pipe connections.	1	Set		
D	Control Panel Control panel for the above pumps with contactors, over voltage and under voltage protection relays, MCBs, start/stop push buttons and indicators lights. All this shall be housed in a lockable cabinet (with integral isolator) made from SWG 18stainless steel sheet that is oven powder coated. The controls shall also include a float switch or flow switch for prevention against dry running complete with its cable. Painting Allow for painting of the hose reel pipework as per particular specifications.	1	Item		
	Sub-Total 2 Carried Forward to Collection Page	H-30			

Item	Description	Qty	Unit	Rate (Kshs)	Amount (Kshs)
	Water Fire Extinguisher				
Α	9 litres water portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	7	No		
	Carbon Dioxide Gas Fire Extinguisher				
В	9 litres carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	7	No		
	DCP Fire Extinguisher				
С	Dry Chemical Powder fire extinguisher complete with initial charge and mounting brackets.	7	No		
	Manual Bell				
D	Manual Bell	7	No		
	Fire Notices				
E	Allow for fire signage for the hose reel system, fire exits, fire instructions as directed by engineer	14	No		
	Sub-Total 3 Carried Forward to Collection Page H-30				

COLLECTION PAGE FOR FIRE FIGHTING WORKS

Item	Description	Amount (Kshs)
1	Total from page H-27	
2	Total from page H-28	
3	Total from page H-29	
	Total 5 Carried Forward to Summary Page H-31	

SUMMARY PAGE

ltem	Description	Amount (Ksh)
1	Preliminaries	
2	Total 1 for sanitary fittings Installation Works	
3	Total 2 for sanitary fittings Installation Works	
4	Total 3 for plumbing and drainage Installation Works	
5	Total 4 for plumbing and drainage Installation Works	
6	Total 5 for fire reticulation installation Works	
7	Sum for unforeseen work to be used for authorised variations	2,000,000.00
	Totals for Plumbing and Drainage Installation Works Carried to Form of Tender	
Amo	unt in words	

Amount in words	
Tenderer's Name and Stamp	
Address	
Period To Execute The Works	
Telephone No	
Mobile Phone No.	
Tenderer's V.A.T No	
Tenderer's P.I.N No	
Tenderer's Signature	. Date
Witness Signature	Date

SCHEDULE OF UNIT RATES

ITEM	DESCRIPTION	UNIT	RATE (Kshs)
4	440 DDD :	T 3.6	
1.	110mm PPR pipe	LM	
	75mm ditto	LM	
	63mm ditto 50mm ditto	LM LM	
	40mm ditto	LM LM	
	32mm ditto	LM LM	
	25mm ditto	LM LM	
	20mm ditto	LM LM	
	20mm ditto	LIVI	
2.	Single Bowl Single Drain Stainless Steel Kitchen Sink	No.	
3.	Close coupled water closet, white (Dual flush "Duravit")	No.	
4.	Countertop "Duravit" wash hand basin (Chrome pop up waste)	No.	
5.	Paper Towel disposal bin 20L (Foot pedal operated lid)	No.	
6.	Paper Towel dispensing unit (250 Sheets)	No.	
7.	Manual Push Button Flush valve for water closet as "Sloan"	No.	
8.	110mm stainless steel pipe	LM.	
9.	Urinal bowl	No.	
10.	Urinal dividers	No.	
11.	Urinal flush valve	No.	
12.	Water closet flush valve	No.	
13.	Water closet pan squatting	No.	
14.	Water closet pan floor standing back to wall	No.	
15.	Gully trap of stainless 200 x 200 mm with outlet diameter of 110mm	No.	
16.	Grease interceptor of 787mm x 597mm x 596.9mm with a flow rate of 50gpm with all the accessories of filters and basket	No.	
17.	Hygienic channel 2030 x 200 mm with an outlet of 125mm	No.	
18.	Hygienic channel 2030 x 200 mm with an outlet of 125mm	No.	
20.	Manhole inspection chamber 600 mm x 450mm	No.	
21.	Masonry gully trap 300mm x 300mm	No.	

	SECTION I:	
TECHNICAL SCHEI	DULE OF ITEMS	S TO BE SUPPLIED

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CLAUSE No.		<u>PAGE</u>
1.	GENERAL NOTES TO THE TENDERER	(i)
2.	TECHNICAL SCHEDULE	I-1-I-2

TECHNICAL SCHEDULE

1. General Notes to the Tenderer

- 1.1 The tenderer shall submit technical schedules for all materials and equipment upon which he has based his tender sum.
- 1.2 The tenderer shall also submit separate comprehensive descriptive and performance details for all plant apparatus and fittings described in the technical schedules. Manufacturer's literature shall be accepted. Failure to comply with this may have his tender disqualified.
- 1.3 Completion of the technical schedule shall not relieve the Contractor from complying with the requirements of the specifications except as may be approved by the Engineer.

TECHNICAL SCHEDULE

The tenderer must complete in full the technical schedule. Apart from the information required in the technical schedule, the tenderer **MUST SUBMIT** comprehensive manufacturer's technical brochures and performance details for all items listed in this schedule (fill forms attached).

ITEM	fill forms attached). DESCRIPTION	MANUFACTURER	COUNTRY	REMARKS
	DESCRIPTION	MINITEREN	OF ORIGIN	(Catalogue No. etc.)
A	Gate Valves			
В	Pipes PPR			
C	Water closet			
D	Wash hand basin			
Е	Urinal bowl			
F	GMS pipe			
G	Fire pump set			
Н	Hose reel			
I	Water/co2			
	extinguisher			
J	Grease interceptor			
K	Gully			
L	Hygienic channel			
M	110mm stainless steel			
	pipe			
N	Water closet flush			
	valves			
О	Flush valve for urinals			

Catalogue must be attached for all the items in the schedule of material above

SECTION J:

DRAWING SCHEDULE

CONTENTS

<u>CLA</u>	USE No.	<u>PAGE</u>
1.	DRAWING SCHEDULE	J-1

DRAWING SCHEDULE:

As shall be provided during project implementation.

SECTION K:

STANDARD FORMS

STANDARD FORMS

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<u>FORM</u>	<u>I</u> <u>P</u>	<u>AGE</u>
1.	PERFORMANCE BANK GUARANTEE	K-1
2.	TENDER QUESTIONNAIRE	K-2
3.	CONFIDENTIAL BUSINESS QUESTIONNAIRE	K-3
4.	KEY PERSONNEL	K-5
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6	SCHEDULE OF ON-GOING PROJECTS	K-7
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8	EVIDENCE OF FINANCIAL RESOURCES	K-9
9	NAME OF THE BANKERS	K-10
10	DETAILS OF LITIGATIONS OR ARBITRATION PROCEEDINGS	K-11
11	SCHEDULE OF MAJOR ITEMS OF CONTRACTOR'S EQUIPME PROPOSED FOR CARRYING OUT THE	ENT
	WORKS	K-12

<u>NOTE:</u> ALL FORMS IN THIS SECTION MUST BE FILLED AS THEY SHALL BE PART OF THE EVALUATION CRITERIA

PERFORMANCE BANK GUARANTEE

To: THE PRINCIPAL / CEO KENYA UTALII COLLEGE P.O. Box 31052-00600
NAIROBI Dear Sir,
WHEREAS
AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;
AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:
NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of: Kshs
and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings
words) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.
We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.
We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification.
This guarantee shall be valid until the date of issue of the Certificate of Completion. SIGNATURE AND SEAL OF THE GUARANTOR
Name of Bank
Address

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			
Busi	ness Name			
Loca	ation of business premis	ses: Country/To	wn	
Plot	No	Str	eet/Road	
Post	al Address	Tel	No	
Natu	are of Business			•••••
Curr	ent Trade Licence No.	E	xpiring date	••
	imum value of busines ya Shillings	-	lle at any time:	
Nam	ne of your bankers			
Bran	nch			
Part	2 (a) – Sole Proprietor	r		
You	r name in full		Age	
Nati	onality	Cou	ntry of Origin	
Citiz	zenship details			
Part	2 (b) – Partnership			
Give	e details of partners as j	follows:		
	Name in full	Nationality	Citizenship Details	Shares
1.				
2.				
3.				
4.				

Part 2	Q(c) – Registered Con	ıpany		
Priva	te or Public			
State	the nominal and issue	ed capita of the comp	eany:	
Nomi	nal KShs			
Issued	d KShs			
Give	details of all directors	as follows:		
	Name in full	Nationality	Citizenship Details* Shar	res
1.				•••••
2.				
3.				
4.				
Part 2	2(d) Interest in the Fi	irm:		
Is the intere		in the employment o (Delete as n	of the Government of Kenya W. ecessary)	HO has
	Title Date	Si	gnature	

^{*} Attach proof of citizenship

KEY PERSONNEL

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

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

I certify that the above inf	formation is correct.	
• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •
Title	Signature	Date

CONTRACTS COMPLETED IN THE LAST FIVE (5) YEARS

Work performed on works of a similar nature and volume over the last five years.

PROJECT NAME	NAME OF CLIENT	TYPE OF WORK AND YEAR OF COMPLETIO N	VALUE OF CONTRACT (Kshs.)

ourselves.	ks were successfully carried	out and completed by
Title	Sionature	Date.

SCHEDULE OF ON-GOING PROJECTS

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

PROJECT NAME	NAME OF CLIENT	CONTRACT SUM	% COMPLETE	COMPLETI ON DATE

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

FINANCIAL REPORTS FOR THE LAST FIVE YEARS (Balance sheets, Profits and Loss Statements, Auditor's reports, etc. List below and attach copies)

1.	•
2.	•
3.	
4.	•
	•
5.	·
6.	•
7.	•
8.	·
9.	
10	

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.)

•		
•	 	
•		
•		
•		
•		
T		
•		

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

·			
•			•
•			<u>.</u>
•			
•			
•			
•			•

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?)