

**NAIROBI CITY COUNTY**



**CONTRACT No. NCC/EW&E/T/632/2016-2017**

**PROPOSED ABLUTION BLOCK AT SHADRAK  
KIMALEL IN NGUMO WARD**

**APRIL 2017**

**Closing Date: 26<sup>th</sup> APRIL, 2017**

**Closing Time: 12:00 noon**

## **APPENDIX TO INSTRUCTIONS TO TENDERERS**

### **Notes on the Appendix to Instructions to Tenderers**

The following appendix to instructions to tenderers shall complement or amend the provisions of the instructions to tenderers (Section II). Wherever there is a conflict between the provisions of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers.

#### **CLAUSE**

#### **13 Tender Security**

Amount of Tender Security is **Kshs 200,000/=**

- 16 (i) The name and address of the Employer for the purposes of submission of tenders is ***Nairobi City County P.O. BOX 30075 – 00100 NAIROBI***
- (ii) The name of the proposed Works and where available the Contract Number is NCC/EW&E/T/632/2016-2017- **Proposed Ablution Block at Shadrack Kimalel in Ngumo Ward.**

(iii) The tender opening date and time 12.00 noon – Wednesday, **26th, April, 2017.**

### **A) ONLY BIDDERS QUALIFIED TO PARTICIPATE UNDER YOUTH AND EMPOWERMENT PROGRAM**

#### **27 Performance Guarantee**

The amount of Performance Security is 10% of the contract price.

#### **EVALUATION CRITERIA:**

The eligible Contractors **MUST** meet the following **MANDATORY CRITERIA** to be considered responsive:

#### **PRELIMINARY EVALUATION (All Are Mandatory)**

- i. Bidders shall prepare and submit two copies (marked clearly “ORIGINAL BID” and “COPY BID”).*
- ii. Offered Eligibility statement on bidders letterhead indicating that the bidder is*

*eligible for the assignment and has not been debarred for any procurement within the last five years*

- iii. Offered Valid Bid Security from Bank and Not Insurance Company for Kes.Bid Security Valid for 120 Days from date of Bid Opening*
- iv. Attach Copy of Current Valid Tax Compliance Certificate*
- v. Attach Copy of valid VAT Certificate*
- vi. Attach Copy of valid PIN Certificate*
- vii. Form of Tender duly completed, signed, stamped and witnessed. Appendix to Form of Tender shall also be dully completed.*
- viii. BOQ duly completed (Bidders are advised to fill on the provided BOQ as a Mandatory requirement for Uniformity during Evaluation)*
- ix. All alterations if Any countersigned by the bidder*
- x. Confidential Business Questionnaire duly filled*
- xi. Attach Copy of Valid Certificate of Incorporation/Registration.*
- xii. Details of any past or current litigation or arbitration proceedings in which the Bidder is/was involved as one of the parties.*
- xiii. Submit written Power of Attorney on Bidder's Letter head*
- xiv. Must attend the Mandatory Site visit*
- xv. Bidders are advised to Serialize their document and Stamp every Page of their document with Official rubber Stamp for Ownership*
- xvi. A bidder not qualified to participate as a main bidder under youth and women empowerment program **MUST** in addition to fulfilling the conditions set herefore, submit as part of their bid, a proposed sub-contractor who meets criteria B2 set out hereafter in the youth and women empowerment program, the sub-contractor's completed price schedule showing the items to be sub-contracted amounting to at least 30% of the bidder's bid sum and a legally enforceable agreement between the main bidder and the sub-contractor. A bidder who fails in this regard shall be disqualified.**

*A firm lacking in any of the above details **shall be dropped** at this stage and shall not be progressed to the Technical Evaluation stage.*

### **TECHNICAL EVALUATION**

- 1. Experience in works of a similar nature for any of the last five years, and clients (List and contacts) who may be contacted for further information on these contracts. (Have undertaken similar assignments in value and nature in the last five years. Evidence of this, e.g. testimonial letters or copies of orders from such authority, shall be submitted)*

2. Evidence of items of construction equipment owned or to be leased. (Schedule of relevant Machines).
3. Qualifications and experience of key site management and technical personnel proposed for the Contract; indicating their technical capability. Attach CV's.

Site Manager – Diploma in Building & Construction/ Civil Engineering or equivalent and five years' experience.

Land Surveyor – Diploma in Survey or equivalent field and five years' experience.

4. Be a registered Contractor Category NCA6 or above issued by the National Construction Authority (NCA) and copy of the registration certificate must be submitted with this bid.
5. Must indicate Completion period of this assignment
6. Submit 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 bid is accepted. Any change in the program or schedule shall be subjected to the approval of the Engineer.

**N/B: Only bidders meeting all the above and proposing sub-contractors who meet all criteria B2 set out hereafter shall proceed to Financial Evaluation.**

## **B) BIDDERS QUALIFIED TO PARTICIPATE UNDER YOUTH AND WOMEN EMPOWERMENT PROGRAM**

The purpose of this clause is to give effect to the policy pronouncement by the Government of the Republic of Kenya (GoK) to empower youth and women by allocating at least 30% of public procurement contracts to youth and women. For a bidder to qualify for this empowerment, they must meet the following criteria:-

### **B1. Main Bidder participating singly or in joint venture under the Youth and Women empowerment program**

#### **28 Performance guarantee**

A bidder qualified to participate as main bidder under youth and women empowerment program set out herein must provide at least 5% of the contract price and in the form of a bank guarantee or 10% in the form of an insurance guarantee by an insurance company recognized by Public procurement oversight authority (PPOA).

#### **Preliminary Mandatory criteria**

- i. Bidders shall prepare and submit two copies (marked clearly “**ORIGINAL BID**” and “**COPY BID**”).

- ii. Offered Eligibility statement on bidders letterhead indicating that the bidder is eligible for the assignment and has not been debarred for any procurement within the last five years*
- iii. Offered Valid Bid Security from Insurance Company for Kes.100,000*
- iv. Bid Security Valid for 120 Days from date of Bid Opening. **Security shall be provided by a reputable bank or insurance company recognized by the public procurement and oversight authority (PPOA)***

**Criteria v to x are not mandatory but bidder must provide evidence that they are in the process of fulfilling conditions them but not considered ineligible by the respectively concerned authorities.**

- v. Attach Copy of Current Valid Tax Compliance Certificate*
- vi. Attach Copy of valid VAT Certificate*
- vii. Attach Copy of valid PIN Certificate*
- viii. Form of Tender duly completed, signed, stamped and witnessed. Appendix to Form of Tender shall also be dully completed.*
- ix. BOQ duly completed (Bidders are advised to fill on the provided BOQ as a Mandatory requirement for Uniformity during Evaluation)*
- x. All alterations if Any countersigned by the bidder*
- xi. Confidential Business Questionnaire duly filled*
- xii. Attach Copy of Valid Certificate of Incorporation/Registration. **(as Limited Liability Company, Partnership or sole proprietor)***
- xiii. Attach audited financial accounts for the last two years **(not Mandatory but bidder must alternatively submit a letter from a reputable bank to the effect that the bank will provide lines of credit to meet the cash flow requirements of this contract).***
- xiv. Details of any past or current litigation or arbitration proceedings in which the Bidder is/was involved as one of the parties.*
- xv. Must attend the Mandatory Site visit*
- xvi. Bidders are advised to serialize and Stamp every Page of their document with Official rubber Stamp for Ownership*
- xvii. Directors must be women, youth, or mix of these categories. A youth is a person aged 18-35 years. A woman is a female gender person aged 18 years and above.*

*A firm lacking in any of the above details **shall be dropped** at this stage and shall not be progressed to the Technical Evaluation stage.*

## **TECHNICAL EVALUATION**

1. *Experience in works of a similar nature for any of the last five years, and clients (List and contacts) who may be contacted for further information on these contracts. (The bidder or at least a director or a key member of the top management of the firm must demonstrate experience of similar work in environment similar to the social environment of the project area in the last five years. Evidence of this, e.g. testimonial letters or copies of orders from such authority, shall be submitted)*
2. *Evidence of items of construction equipment owned or to be leased. (Schedule of relevant Machines).*
3. *Qualifications and experience of key site management and technical personnel proposed for the Contract; indicating their technical capability. Attach CV's. At least one top management person must demonstrate academic/ professional qualifications relevant to the nature of work and or social environment similar to that of the project area.*

*Site Manager – Diploma in Building & Construction/ Civil Engineering, degree in sociology or equivalent at least a director or a key member of the top management of the firm must demonstrate experience of similar work in environment similar to the social environment of the project area in the last five years.*

*Land Surveyor – Diploma in Survey or equivalent field and five years' experience.*

4. *Be a registered Contractor with the National Construction Authority (NCA) category NCA6 or above and copy of the registration certificate must be submitted with this bid, (or provide evidence that they are in the process of fulfilling this condition but not considered ineligible by the NCA).*
5. *Must indicate Completion period of this assignment*
6. *Submit 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 bid is accepted. Any change in the program or schedule shall be subjected to the approval of the Engineer.*

***N/B: Only bidders meeting all the above shall proceed to Financial Evaluation.***

## **B2. Sub-Contractors participating under the Youth and Women empowerment program**

### **Preliminary Mandatory criteria**

- i. *Bidders shall prepare and submit two copies (marked clearly "ORIGINAL BID" and "COPY BID").*
- ii. *Offered Eligibility statement on bidders letterhead indicating that the bidder is eligible for the assignment and has not been debarred for any procurement within*

*the last five years*

**Criteria iii to viii are not mandatory but sub-contractor must provide evidence that they are in the process of fulfilling conditions them but not considered ineligible by the respectively concerned authorities.**

- iii. *Attach Copy of Current Valid Tax Compliance Certificate*
- iv. *Attach Copy of valid VAT Certificate*
- v. *Attach Copy of valid PIN Certificate*
- vi. *Form of sub-contract quotation in the format of form of bid duly completed, signed, stamped and witnessed. Appendix to Form of sub-contract quotation shall also be dully completed.*
- vii. *Selected BOQ items duly completed (Sub-contractors are advised to fill on a copy of the provided BOQ as a Mandatory requirement for Uniformity during Evaluation). Items not being quoted for shall be marked "N/A" in the amount column.*
- viii. *All alterations if Any countersigned by the bidder and sub-contractor*
- ix. *Confidential Business Questionnaire duly filled. Attach Copy of Valid Certificate of Incorporation/Registration. (as **Limited Liability Company, Partnership or sole proprietor***
- x. *Attach audited financial accounts for the last two years (**not Mandatory but sub-contractor must alternatively submit a letter from a reputable bank to the effect that the bank will provide lines of credit to meet the cash flow requirements of the sub-contract**).*
- xi. *Submit written Power of Attorney on Sub-contractor's Letter head*
- xii. *Sub-contractors are advised to Stamp every Page of their document with Official rubber Stamp for Ownership*
- xiii. *Directors must be women, youth, or mix of these categories. A youth is a person aged 18-35 years. A woman is a female gender person aged 18 years and above.*

*A bidder proposing a sub-contractor lacking in any of the above details **shall be dropped** at this stage and shall not be progressed to the Technical Evaluation stage.*

### **TECHNICAL EVALUATION**

1. *Experience in works of a similar nature for any of the last five years, and clients (List and contacts) who may be contacted for further information on these contracts.(The bidder or at least a director or a key member of the top management of the firm must demonstrate experience of similar work*

in environment similar to the social environment of the project area in the last five years. *Evidence of this, e.g. testimonial letters or copies of orders from such authority, shall be submitted*)

2. *Evidence of items of construction equipment owned or to be leased. (Schedule of relevant Machines).*
3. *Qualifications and experience of key site management and technical personnel proposed for the Contract; indicating their technical capability. Attach CV's. At least one top management person must demonstrate academic/ professional qualifications relevant to the nature of work and or social environment similar to that of the project area.*

*Site Manager – Diploma in Building & Construction/ Civil Engineering, degree in sociology or equivalent at least a director or a key member of the top management of the firm must demonstrate experience of similar work in environment similar to the social environment of the project area in the last five years.*

*Land Surveyor – Diploma in Survey or equivalent field and five years' experience.*

4. *Be a registered Contractor with the National Construction Authority (NCA) category NCA7 or above and copy of the registration certificate must be submitted with this bid, (or provide evidence that they are in the process of fulfilling this condition but not considered ineligible by the NCA).*
5. *Must indicate Completion period of this assignment*
6. *Submit 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 bid is accepted. Any change in the program or schedule shall be subjected to the approval of the Engineer.*

***N/B: Only bidders proposing sub-contractors meeting all the above shall precede to Financial Evaluation.***



***FINANCIAL EVALUATION***

The lowest Evaluated bidder shall be awarded the contract.

## **SPECIAL SPECIFICATIONS**

### **Proposed Construction of Ablution block at ShadrakKimalel Primary School in Ngumo Ward.**

- a) **Location of the works** - The project site is located in Ngumo Ward.
- b) **Extent of the contract** - The works to be executed under this contract comprise:
  - i. Maintenance during Defect Liability Period of 12 months

#### **a) Provision of equipments, materials and labour**

The contractor shall provide all equipments, transport consumable materials and labour necessary for the satisfactory completion of the works in compliance with the specifications herein. The engineer reserves the right to inspect the plant and materials before their use on the works, and may reject the items of plant or materials that, in his/her opinion is (are) substandard or inappropriate.

#### **b) Occupation of site**

The employer will provide the land on which the works shall be constructed. The contractor shall be given possession of such parts of the site that he requires for activities related to the construction of the works. The contractor shall organize at his own cost and convenience for storage of materials, equipment and camp during the period of the contract provided his operation does not interfere with the daily activities of the local community.

#### **c) Priority to local labour**

The contractor shall give priority to the local community when hiring unskilled and skilled labour. The recommended proportion of local labour to the total workforce will be as follows:

- ii. Unskilled labour 80%
- iii. Semiskilled labour 50%
- iv. Skilled labour 20%

The contractor shall be responsible for community mobilization to facilitate execution of the project. This will entail calling for stakeholders meetings and forming village teams include community based organizations to enable smooth operation on the ground. All this will be done in liaison with the project manager.

**d) Client's right to alter quantities**

The client retains exclusive right to alter the quantities at any stage of the works as the conditions on the ground may warrant. The resultant quantities shall be paid for at the rates quoted in the bid at the tender stage.

**e) Definition of the site**

The site shall include all those areas of land which, being public or private:

- v. Are being provided by the Employer for the construction of the permanent works;
- vi. Are being provided by the Employer for temporary works, including camps, offices and stores;
- vii. Are acquired, leased, or operated by the contractor as borrow pits or spoil tips for the permanent works, including all access roads.

**f) Use of the site**

- viii. Access to the sites shall be gained from public roads. The contractor shall be responsible for maintaining all existing site roads affected by his work while he is on site. He shall also be responsible for repairing and making good any damage to these roads. If the contractor, his subcontractors or suppliers, causes the damage then the cost of repairs shall be to his own.
- ix. The contractor shall be responsible for the construction, clearing, negation for or otherwise as may necessary to access the sites. The rates quoted in the BOQ shall be deemed to include these costs among others.
- x. The contractor shall promptly remove at his own cost any vehicle, wagon, barge or vessel or any other obstruction under his control that the Engineer may require to be removed for any purpose.

- xi. The contractor shall not use the site for any purpose not connected with the works unless the written permission of the Engineer has been obtained.
- xii. The contractor shall restrict his activities to those areas of the site adjacent to the works being executed and shall avoid encroachment upon lands outside the areas for which possession has been given. Any liabilities resulting from such encroachment shall be to the contractor's cost and he shall hold the employer indemnified.

**g) Materials for the works**

- xiii. All materials shall comply with the appropriate standard specifications unless herein otherwise required. All materials specifications in the drawings shall override all others except that decreed by the Engineer in writing.
- xiv. Materials to be used in the works shall be approved by the engineer in writing. Any damage, contamination or any other undesirable effect on the materials during transport, storage, handling, forming, etc shall be remedied by the contractor as may be instructed by the Engineer. The Engineer's decision shall be final.
- xv. The Engineer shall retain the right to inspect the materials at source. If the Engineer rejects any materials at such stage, they shall not be transported to site. Notwithstanding approval at this stage, the materials shall be subject to condition (iii) above.

**h) Diligent performance and workmanship**

- xvi. The contractor shall at all times perform the works diligently and in accordance with sound professional practice. In particular the contractor shall not proceed from one stage of the works to another without the express permission of the Engineer.
- xvii. Workmanship shall be to the quality implied in the drawings or otherwise as may be directed by the Engineer in writing.

**i) Construction process**

The contractor's role shall be to fundamentally construct the works at the tendered sum, to the specified quality and within the agreed time. The contractor shall organize his work to achieve these objectives.

## **j) Payments**

The Contractor shall perform the services and carry out his obligations herein with all due diligence, efficiency quality and economy. The Contractor shall always act, in respect of any matter relating to this Contract as faithfully as possible and shall at all times support and safeguard the Client's legitimate interests in all the construction works.

Payment to the Contractor shall thus only be effected upon the certification that all the construction works are completed according to the laid down standards and the works shall be certified complete and satisfactory by the Engineer.

## **k) Excavation for foundations**

The foundation trenches and column bases shall be excavated to the widths and depths of the concrete foundations shown in the drawings and or stated in the BOQ or to such widths and depths that may be instructed by the Engineer after examining the excavations. Widths and depths shall be to the exact dimensions of finished foundations shown in the drawings or as may be directed by the Engineer. If the contractor excavates in excess of these on his own, he shall be responsible for the extra cost arising there from whether directly or indirectly. This shall include remedial works and all materials needed.

## **1.2 Measurements & rates**

1. The Bidder shall include in his rates for all accommodation and transport, which he considers, may be required to his employees and for other allowances payable to and services provided for them. In the provision of such accommodation, transport and services and in the making of such allowances he shall observe the requirements of all relevant ordinance regulation and by-laws.
2. A bidder shall include in his rates for all site offices, quarters, yards stores and other premises which may be required for the carrying out of the works in accordance with the contract.
3. A bidder shall include in his unit rates for all necessary vehicular or human traffic diversions and such diversion shall be arranged so as to cause the minimum disturbance. Proposed arrangements shall be submitted to the Engineer for approval before being put into operation.
4. All measurements are strictly net unless otherwise stated and the rates quoted by the bidder will be deemed to cover tolerances, working space, bulking etc and work will be measured to net finished surface.

5. The depth of excavation will be measured from existing ground level. Measurements for the other excavation will be to the dimensions, which are required to accommodate the permanent work alone. A bidder shall accordingly allow in his prices for any amount of extra excavation, which may be necessary to complete the work to the satisfaction of the Engineer. Where rock is encountered in excavation, the depth will be measured to the bottom of the trench.
6. The contractor shall at his own expenses dig any necessary trial holes in order to determine ground conditions and/or the location of possible underground services, obstructions etc, that are likely to affect the contract works.
7. In the schedule of rates, items that include for disposal of excavated materials, the bidder is to include for transporting of this excavated materials from site, to an approved spoil. The bidder is deemed to have investigated the location and use of the spoil areas prior to bidding in agreement with relevant Local Authority or other body and will be deemed to have due allowance in the rates entered against the appropriate items in the Bills of quantities for any cost which he may incur in providing tips and in transporting, disposing etc, of the material.

### **1.3 Office for contractor**

The Contractor shall have an office on or near the works on a site to be approved by the Engineer and which will be open and attended at all hours during which work is in progress.

### **1.6 Temporary traffic signs**

The contractor shall erect and maintain on the works and at prescribed points on the approaches to the works, all traffic signs necessary for the warning, direction and control of the vehicular and or human traffic and the size of all such signs and the lettering and wording thereon shall be approved by the Engineer before erection. The signs shall be of a reflection type or adequately illuminated at night by approved means.

#### **Safety barriers**

The contractor shall cordon off all works and excavations that may pose danger to the public within the area using barrier tapes of the pelican type or equivalent. Sites of deep excavations and or lifting of bricks or concrete filled containers shall be marked with "DANGER SIGN" clearly legible from 5m distance.

## **SECTION VI - DRAWINGS**

The scope of the works is defined by the following drawing





## **PREAMBLE**

### **1. General**

- 1.1 These Bills of Quantities form part of the Bid Documents and is to be read in conjunction with the Conditions of Contract, Specifications and Drawings
- 1.2 The method of measurement is in general according to “Civil Engineering Standard Method of Measurement” (CESMM3, Third Edition) published by the Institution of Civil Engineers, London, 1991
- 1.3 Any condition contained in this Preamble shall be deemed to prevail in the event of contradiction with a condition contained in the above “CESMM3”.
- 1.4 The brief descriptions of Works under items for the Bills of Quantities, are purely for the purpose of identification only, and shall in no way limit, modify or supersede the detailed description given in the Conditions of Contract, Specification and Drawings.
- 1.5 The Bills of Quantities have been separated into portions of the works for convenience in tabulating quantities and in pricing. They are not intended to subdivide the actual works and the whole of the works must be considered when pricing the various items on the Bills of Quantities.
- 1.6 A rate and price or lump sum shall be inserted in Ink against each item in the Bills of Quantities and Schedule of Daywork whether quantities are stated or not. Items against which no rate, price or sum is entered by the Bidder will not be paid for when executed, but will be deemed to be covered by other rates or prices inserted in the Bills of Quantities.
- 1.7 During construction the Units rate established for an Item in one Bill of Quantities may be used as a basis for establishing a Units rate for similar work in another Bill of Quantities which contains no Units rate for the said item.
- 1.8 The cost of complying with all conditions, special risks, obligations and liabilities described in the Conditions of Contract and/or the Specifications are to be covered by the rates inserted in the Bills of Quantities.
- 1.9 Notwithstanding any limits which may be implied by the brief description of items in the Bills of Quantities and/or the explanation in the Preamble, the rates must include all incidental and contingent expenses of any kind together with any temporary work and installations necessary to complete and maintain the Works in accordance with the Contract Documents.
- 1.10 The rates and prices inserted by the Contractor in the Bills of Quantities are to be fully inclusive of value or the work described under the items and shall cover all overhead charges and profit.
- 1.11 The quantities set out in the Bills of Quantities are believed to give a fair indication of the extent of the works, and when priced it is given for the purpose of facilitating the comparison of the various Bids received. There is no guarantee for any one particular item or group of items in the Bills of Quantities are to be executed.

- 1.12 Upon completion, the work shall be measured for payment in accordance with the method adopted in the Bills of Quantities and under the items as therein set forth, notwithstanding any custom to the contrary. The net measurement or weight of the finished work without allowances for waste will be taken as the quantities eligible for payment.
- 1.13 No claim will be approved in respect of any work or method of execution which may be described in the Contract Documents, but for which there are no corresponding items in the Bills of Quantities.
- 1.14 The rates inserted in the Bills of Quantities for parts of composite work shall cover for the completion of all component parts, although they may not be specifically described in the items, preamble or Specifications.
- 1.15 The cost of keeping excavations and works free from water shall be covered by the rates inserted in the Bills of Quantities.
- 1.16 When in the description of an item in the Bills of Quantities, a reference is made to a clause in the Conditions of Contract and/or the Specifications it is the clause principally but not exclusively related to the item.

## **2 DEFINITIONS**

- 2.1 Daywork. The term "Daywork" means the method of valuing the work on the basis of the time spent by the workmen, the materials used and the plant employed. The rates inserted in the Schedules of Daywork are deemed to cover overhead charges and profit, Site supervision and staff, insurance, travel and lodging allowances and any other emoluments and allowances payable to the workmen in connection with the carrying out of the Daywork.
- 2.2 Prime Cost Items. The Terms "Prime Cost" means the net sum entered in the Bills of Quantities by the Project manager as a sum provided to cover the cost of, or to be paid by the Contractor to merchants or others, for specific articles or materials to be supplied or work to be done, after deducting all trade discounts and all discount for cash. If so stated in the Bills of Quantities separate prices are to be entered by the Contractor for covering the profit and overheads on the Prime Cost in the form of a percentage together with the cost if any other services are to be provided in connection with the Prime Cost Item.
- 2.3 Provisional Quantities or Sums. The Terms "Provisional Quantities" or "Provisional Sums" mean any Quantity or sum of money fixed by the Project Manager and included in the Bills of Quantities to provide for work not otherwise included therein.  
The work executed under a Provisional Item shall be measured and valued as described in "Conditions of Contract".
- 2.4 Lump Sum. The Term "LUMP SUM" expressed as "Item" in the Quantity column in the Bills of Quantities shall be priced by the Contractor to cover an offer to carry out the work shown upon the drawing or drawings or described in the Conditions of Contract and/or Specifications referred to under the item. The sum entered shall cover all costs and charges whatsoever in respect of the works referred to and shall be at the Contractor's sole risk.
- 2.5 Where the word "Provide", "Allow" or word of similar meaning are used in any item in the Bills of Quantities it shall be taken to mean that the sum entered

by the Contractor shall cover all costs and charges in respect of the work referred to and shall be at the Contractor's sole risk.

- 2.6 Where the words "Handle" or "Handling" are used in any item in the Bills of Quantities they shall be taken to mean taking delivery, unloading, stacking, storing, taking from store, transporting, unloading and getting into position for fixing all materials concerned and all other contingent expenses.
- 2.7 Wherever the words "Selected" "As directed", "As required", or words of similar meaning are used in the Bills of Quantities, it is to be understood that the selection, direction or requirements of the Project Manager are intended. Similarly, the words "Approved by", "Satisfactory" or other synonyms shall mean "Approved by" or "Satisfactory to" the Project Manager and the Project Manager's approval must first be obtained before the materials are ordered or the works to which the words refer are put in hand.
- 2.8 Wherever the words "Necessary", "Proper" or words of similar meaning are used in the Bills of Quantities with respect to the extent, conduct or character of work described, it is to be understood that they shall mean that the said work shall be executed to the extent, must be conducted in a manner, or be of a character which is "necessary" or "Proper" in the opinion of the Project Manager.
- 2.9 A hyphen between two dimensions means a range of dimensions which includes all dimensions exceeding that preceding the hyphen but not exceeding that following the hyphen.

### 3. ABBREVIATIONS

#### 3.1 General

P.C.	Shall Mean	Prime Cost
P.S.	" "	Provisional Sum
Ditto	" "	The whole of the preceding description except the dimensions or measurements stated.
E.O.	" "	Extra over
Spec.	" "	Specifications
Con.	" "	Conditions of Contract
Cl.	" "	Clause
Drg. No.	" "	Drawing Number
B.S.	" "	British Standard or B.S. Specification
D.I.	" "	Ductile Iron
G.S.	" "	Galvanized Steel
C.I.	" "	Cast Iron
N.P.	" "	Nominal Pressure in bars
M.S.	" "	Mild Steel
R.C.	" "	Reinforced Concrete
PVC	" "	Unplasticised Polyvinyl Chloride
Kes.	" "	Kenya Shillings

#### 3.2 Measurements and Weights

m <sup>3</sup>	Shall mean	Cubic metre
m <sup>2</sup>	" "	Square metre
m	" "	Linear metre

	mm	“	“	Millimetre
	dia	“	“	diameter
	nr	“	“	Number
	Tonne (t)	“	“	1,000 kg
	Kg	“	“	Kilograms
Hr	“	“	Hour	
	l	“	“	Litre

75mm to 150mm shall mean Exceeding 75mm but not exceeding 150mm

(All items described in this way shall be similarly understood.)

### 3.3 Dimensions

When dimensions are entered the length (l) appears first, the width (w) second, and the depth (d) or height (h) third.

## 4. METHOD OF MEASUREMENTS

### 4.1 Site Clearance

Site Clearance is measured in square metres or hectares except for a clearance for pipeline which is measured in linear metres with a width of 2.50m.

Payment for Site Clearance will be based upon this width except that the Project Manager reserves the right to restrict this width because of the presence of obstructions, roads, houses and the like. No claims for additional space will be entertained by the Project Manager.

No claims for inconvenience and the like caused by obstructions will be entertained.

The girth of a tree shall be measured approximately 1.00m above the ground level. Trees with a girth less than 300mm shall be covered by the rate for clearance, bigger trees are measured separately.

The rate for clearance shall cover the cost of disposal of all waste material in a manner approved by the Project Manager.

### 4.2 Excavation and Filling

The excavated materials will be classified as described in the Specifications, Section No. 3

The rates for excavation, whether measured separately or included under other items shall amongst others cover the following:

- (a) Excavating, trimming, cleaning, disposal, storage, filling and compacting
- (b) Supplying of bedding material around pipes, fittings, valves etc

- (c) All necessary supports and pumping
- (d) Disposal of excavated material within a distance of 200 metres
- (e) All extra costs arising from phasing earthwork, including re-excavation and replacement of fill.

The volume of excavations in open cut will be measured in cubic metres and will be measured as the minimum required excavation for carrying out the Works

Pipe trenches are measured in linear metres as one item for each pipe size with minimum width and width as indicated on the drawings. The rate shall cover extra excavation for joints where necessary, but extra depth will be paid for where ordered by the Project Manager.

Rates for trenches with reduced depth or with different soil classifications varying with the depth, to be worked out proportionally.

Earth filling is measured in cubic metres after compaction/ramming is completed.

Payment will be authorized as follows:

- (a) Excavation, trimming and storage: 70% of the rate entered in the Bills of Quantities.
- (b) Bedding material, backfilling, compaction and disposal of surplus materials: 30% of the rate entered in the Bills of Quantities.

The above payments are subject to retention.

#### **4.3 Pipe work**

Pipes are measured in linear metres. The rates for pipes, fittings, valves etc. shall include for supply, handling, unloading at Site, necessary joints and materials used in jointing, cutting and drilling etc., and for bedding, laying, connecting, testing and disinfecting.

Payment for pipe laying will be authorized as follows:

- (a) Lay and joint pipes: 50% of the rate entered in the Bills of Quantities
- (b) Pressure testing of pipes: 40% of the rate entered in the Bills of Quantities
- (c) Disinfection of pipes: 10% of the rate entered in the Bills of Quantities.

For fittings, valves, etc. payment will be authorized as follows:

- (a) Supplying, laying and jointing: 80% of the rate entered in the Bills of Quantities
- (b) Pressure testing: 15% of the rate entered in the Bills of Quantities.
- (c) Disinfection: 5% of the rate entered in the Bills of Quantities.

#### **4.4 Concrete Work**

The rates for concrete shall include for all materials, storage, handling, mixing, transporting, placing and compaction (whether by hand or internal or external vibration) forming slopes, falling and the like, preparing adjacent surfaces, forming all temporary joints, keys, stunt ends, temporary stops, and shuttering of other than permanent faces (except where special items are provided) for placing around reinforcement and other items to be built in, for rubbing down and making good surfaces (except that required to produce fine face), for protecting and curing the concrete; for any additional costs arising from the use, on the Contractor's initiative, of Rapid Hardening Cement in place of ordinary Portland Cement or for a daily return to the Project Manager showing the quantities of cement and the number of mixing of each class of concrete used in each section of the Works and in Temporary Works.

#### **4.5 Formwork**

See "CESMM3" class G.

#### **4.6 Reinforcement**

Rod reinforcement of all diameters will be paid for by weight. The measurement will include all steel detailed on the Drawings including steel stirrups but excluding stools and space bars. Steel will be taken as weighing 7.85 t/m<sup>3</sup> no allowance being made for waste or rolling margin. The rates for reinforcements will be deemed to include for all handling, cleaning, cutting, bending, hooking, tying, supporting in position and all other work necessary in providing and fixing the reinforcement as specified or shown on the Drawings. Fabric reinforcement will be measured in square metre net covered area.

#### **4.7 Steel work**

All steel work shall be priced as lump sum items unless indicated otherwise in the Bills. The approximate steel weights given in the Bills of Quantities are to be considered as indicative only and the Tenderer must satisfy himself that the lump sums entered cover the complete work as shown on the drawings, and include fabrication, handling and erection, or whatever is required for completing the item.

#### **4.8 Blockwork**

Concrete blockwork and dressed stonework will be measured in square metres of covered area for each thickness of blocks. (See also "CESMM" class u). Reinforcement in blockwork is measured separately.

The prices for walling shall include for all straight cutting, bonding plumbing angles, forming reveals, pinning up to underside of concrete soffits and cutting up to sides of columns and cutting and pinning ends of lintels and sills.

#### **4.9 Cladding Work**

Cladding is measured in net square metres covered area with no additions for laps, etc. the rate shall include for supply, storage, handling, cutting and erection of cladding including all flashing, fixings, washers, tropicalized stud caps, etc. in accordance with the manufacturer's instructions and including all other services or items required for completing the works.

#### **4.10 Joinery Work**

The rates for doors and windows, etc, shall include all necessary gluing, spiking, nailing and screwing whether specifically mentioned or not. The rates also include for iron mongery and glazing and for fixing and decorating.

#### 4.11 Finishes

Screed, rendering and plaster work are measured in square metres. The rates shall include for all preparation of backgrounds, making good to window and door frames and around pipes, etc.

Painting is measured in square metres of the area covered. Where the number of coats required is not mentioned in the description under an item, then number of coats are deemed to be two.

The rates shall cover all required preparation of backgrounds, cleansing, rubbing down, applying, cutting in at edges and removal of stains, etc.

#### 4.12 Fencing

Fencing is measured in linear metres in respect of chain-link and all kinds of wires. Concrete fence posts and gate posts are measured in numbers.

<b>DAYWORK SCHEDULE</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate(Kshs)</b>	
	The rates entered in the following schedule will be used in assessing the cost of any extra works ordered by the Engineer for execution on a dayworks basis. The rates to include for the contractor's profits, overheads and any incidentals pertinent therein.				
<b>1</b>	<b>PLANT</b>				
1.1	Excavator/shovel with rock breaker, wet rate	h	1		
1.2	Crawler excavator with rock breaker, wet rate				
1.3	1ton open pick up truck	h	1		
1.4	Lorry (tipper) at least 7 ton capacity	h	1		
1.5	Concrete mixer	h	1		
1.6	Concrete vibrator with drive, flex and 40mm diapocker	h	1		
1.7	Pumps with 10m of hose	h	1		
1.8	Compressor with 2 breakers	h	1		
1.9	8Kva welding genset	h	1		
1.10	HDPE pipe fusion machine capacity up to DN150	h	1		
<b>2</b>	<b>LABOUR</b>				
2.1	Labourer	h	1		
2.2	Stone Mason	h	1		

2.3	Carpenter	h	1		
2.4	Pipelayer/jointer ( Plumber)	h	1		
2.5	Welder	h	1		
2.6	Supervisor	h	1		
2.7	Watchman for day and night	h	1		
<b>3</b>	<b>MATERIAL</b>				
3.1	Coarse aggregate for concrete	t	1		
3.2	Fine as above	t	1		
3.3	Ordinary Portland Cement	t	1		
3.4	190x190mm building stone	m	1		
3.5	Hardcore	t	1		
3.6	Concrete standard mix ST4 in any location	m <sup>3</sup>	1		
3.7	Concrete standard mix ST4 -do-	m <sup>3</sup>	1		
3.8	12mm x 12m HT square twisted steel	Nr	1		
3.9	10mm - ditto	Nr	1		
3.10	8mm - ditto	Nr	1		
3.11	8mm mild steel round bars	Nr	1		
3.12	Cypress sawn timber 100/25	m	1		
3.13	Cypress sawn timber 150/25	m	1		
3.14	DN 150 VJ coupling	Nr	1		
3.15	DN 150 x 75 flanged on the 75mm arm	Nr	1		
3.16	DN 75 x 50 flanged on the 50mm arm	Nr	1		
3.17	DN 75 Flange adapter	Nr	1		
3.18	DN 50 Flange adapter	Nr	1		
3.19	75mm, BS5163, PN 16, flanged to BS 4772 valve	Nr	1		
3.20	50mm, BS5163, PN 16, flanged to BS 4772 valve	Nr	1		
3.21	DN 75 single flange GI spigot	Nr	1		
3.22	DN 50 single flange GI spigot	Nr	1		
3.23	DN 75 MS flange with holes	Nr	1		
3.24	DN 75 MS flange with holes	Nr	1		
3.25	3/8" x 2.5" MS bolt with nut	Nr	1		
3.26	4mm thick fibre reinforced rubber gasket	m <sup>2</sup>	1		
3.27	DN 75 VJ coupling	Nr	1		
3.28	DN 75 x 50 GI reducer bush	Nr	1		
3.29	DN 75 class 'B' GI pipe	m	1		
3.30	DN 50 class 'B' GI pipe	m	1		
3.31	DN 37 class 'B' GI pipe	m	1		
3.32	DN 25 class 'B' GI pipe	m	1		
3.33	DN 50 GI nipple	Nr	1		
3.34	DN 50 GI elbow	Nr	1		
3.35	DN 50 GI bend	Nr	1		
3.36	DN150 x 150 x 100 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.37	DN150 x 150 x 75 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.38	DN150 x 150 x 50 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.40	DN150 x 150 x 37 branch threaded	Nr	1		



	fabricated epoxy coated mild steel tee				
3.41	DN150 x 150 x 25 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.42	DN100 x 100 x 100 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.43	DN100 x 100 x 75 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.44	DN100 x 100 x 50 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.45	DN100 x 100 x 37 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.46	DN100 x 100 x 25 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.47	DN75 x 75 x 75 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.48	DN75 x 75 x 75 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.49	DN75 x 75 x 50 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.50	DN75 x 75 x 50 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.51	DN75 x 75 x 37 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.52	DN75 x 75 x 25 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.53	DN50 x 50 x 50 branch flanged fabricated epoxy coated mild steel tee	Nr	1		
3.54	DN50 x 50 x 50 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.55	DN50 x 50 x 37 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.56	DN50 x 50 x 25 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.57	DN37 x 37 x 37 branch threaded fabricated epoxy coated mild steel tee	Nr	1		
3.58	DN100x100x100 GI tee	Nr	1		
3.59	DN100x100x75 GI reducer tee	Nr	1		
3.60	DN100x100x50 GI reducer tee	Nr	1		
3.61	DN100x100x37 GI reducer tee	Nr	1		
3.62	DN75x75x75 GI tee	Nr	1		
3.63	DN75x75x50 GI reducer tee	Nr	1		
3.64	DN75x75x37 GI reducer tee	Nr	1		
3.65	DN75x75x25 GI reducer tee	Nr	1		
3.66	DN 50 GI equal tee	Nr	1		
3.67	DN 50 x 37 GI tee	Nr	1		
3.68	DN 50 x 25 GI tee	Nr	1		
3.69	DN 37 x DN 25 GI tee	Nr	1		
3.69	DN 37 gate valve (Peglar or equivalent)	Nr	1		
3.70	DN 37 GI equal tee	Nr	1		
3.71	DN 37 x DN 25 GI tee	Nr	1		
3.72	DN 25 GI nipple	Nr	1		
3.73	DN 25 GI elbow	Nr	1		
3.74	DN 25 GI bend	Nr	1		

3.75	DN 25 gate valve (Peglar or equivalent)	Nr	1		
3.76	DN 25 GI equal tee	Nr	1		
3.78	DN75 x 50 HDPE reducer bush	Nr	1		
3.79	DN150 PN16 HDPE pipe	m	1		
3.80	DN100 PN16 HDPE pipe	m	1		
3.81	DN 75 PN16 HDPE pipe	m	1		
3.82	DN 50 PN16 HDPE pipe	m	1		
3.83	DN150x150x150 branch flanged HDPE tee	Nr	1		
3.84	DN150x150x100 branch flanged HDPE tee	Nr	1		
3.85	DN150x150x80 branch flanged HDPE tee	Nr	1		
3.86	DN150x150x50 branch flanged HDPE tee	Nr	1		
3.87	DN100x100x100 branch flanged HDPE tee	Nr	1		
3.88	DN100x100x80 branch flanged HDPE tee	Nr	1		
3.89	DN100x100x50 branch flanged HDPE tee	Nr	1		
3.90	DN80x80x80 branch flanged HDPE tee	Nr	1		
3.91	DN80x80x50 branch flanged HDPE tee	Nr	1		
3.92	DN50x50x50 branch flanged HDPE tee	Nr	1		
3.93	Plumber's hemp	Kg	1		

<b>PROPOSED ABLUTION BLOCK AT KIMILEL PRIMARY SCHOOL</b>					
<b>IN NGUMO-WOODLEY WARD</b>					
<b>BILL NO. 01</b>					
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>A. PRELIMINARIES &amp; GENERAL ITEMS</b>					
A1	Contractor's All Insurance (CAR)	item	1		
A2	Performance bond for the works.	Item	1		
A3	Allow for provision and maintenance of Contractors temporary site office and site store, and removal on completion of the contract.	Days	90		
A4	Allow for setting up project signboard and removal after project completion (location as directed on site). Rate to include for license fees payable to City Council of Nairobi.	nr	1		
	<b>Method related charges</b>				
A5	The contractor may insert here any method related charges he deems is payable to him and which is not included in the items under measured works.	item			
<b>Temporary works</b>					

A6	Allow for dewatering of works and management of effluents during execution of the works.	Days	90		
A7	Provide for preparation and submission to the employer 1No set of virograph and 2No sets of blue print copies (A1 SIZE) of as built drawings for all the structures in the contract. Note that the structures positions in the layout should be actual ( geo-referenced to the national grid).	Item	1		
	<b>Total For Substructure Carried to Collection</b>				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
-	<b>MEASURED WORKS</b>	-	-	-	-
	<b>B. BUILDING SUBSTRUCTURE</b>				
	<b>(ALL PROVISIONAL)</b>				
B.1	Provide for temporary fencing (Hounding off) the area using suitable materials as approved by the engineer .include for dismantling the hound and disposal of the materials there after.	m	60		
B.2	Provide for day and night guarding of the site and the works throughout the project period. Include for all accompanying overheads and profit.	Months	3		
	<b>Setting Out</b>				
B3	Set out the site to S.E's specifications	m	50		
	<b>Excavations</b>				
B4	Clear the site of shrubs, undergrowth small trees, etc and burn on site	sm	60		
B5	Excavate oversite to remove vegetable/top soil approximately 300mm average deep;	CM	21		
B6	Excavate for strip foundation trenches in soil commencing from reduced level: not exceeding 1.5 m deep	cm	45		
B7	ditto for excavation in rock	cm	20		
	<b>Strip Footing</b>				
B8	Sawn Formwork to Vertical sides of strip footing	sm	21		
B9	50 mm Thick blinding under strip foundations (in-situ plain concrete Class 20, mix 1:4:8)	sm	25.2		
B10	Strip footings (200mm thick Insitu Concrete Class 20, mix 1:2:4). Rate to include for Y10 reinforcement bars as per the SE's details	cm	5.04		
	<b>Column Bases &amp; Stub Columns</b>				
	<i>Rate to include formwork and steel reinforcement</i>				

B11	Cast grade 20 reinforced vibrated concrete (Y10) (200mmx300mm) ground beam. Include rings Y8 @ 200mm centre to centre (as per attached drawings)	cm	3		
B12	Cast 4 No.grade 20 reinforced vibrated concrete (Y12) (1000mmx1000mmx200mm) column bases. (as per attached drawings)	cm	1		
B13	Cast 4No.grade 20 reinforced vibrated concrete (Y12) (200mmx200mm) columns .rings Y8 @ 150mm spacing. Average height of 4m (as per attached drawings)..	2	CM		
	<b>WALL</b>				
B11	Natural Stone walling bedded and jointed in cement sand mortar (1:4) 200mm thick walling reinforced as described	sm	63		
B12	12mm thick cement sand (1:4) rendering to stone wall externally	sm	45		
	<b>Hardcore and Backfill</b>				
B13	Return, fill and ram with selected and approved excavated material around excavations	cm	24		
B14	Load and cart away excavated materials from site	cm	42		
B15	300mm thick hardcore of approved imported material: well watered and compacted in 150 mm thick (maximum) layers	cm	12		
B16	Level and (50mm thick) blind surface of hardcore with approved sand or quarry dust water and roll as described to receive concrete	sm	40		
B17	Termidor "Dragnet" Gladiator or equal and approved insecticide treatment with a 10 years minimum guarantee period to hardcore fill	sm	30		
B18	1000 gauge damp proof membrane laid on blinded hardcore	sm	30		
B19	BRC mesh Ref A142 weighing 2.22kg/m <sup>2</sup> including	sm	30		
B20	Insitu vibrated reinforced concrete (1:2:4) class 20/20mm in 100mm thick bed	sm	32		
B21	Sawn formwork to Edge to bed 150-225mm wide	lm	30		
	<b>Total For Sub-structure Carried to Collection</b>				
	<b><u>C. BUILDING SUPERSTRUCTURE</u></b>				
	<b>1.External Walls</b>				
	<b><u>Machine dressed stone walling bedded and jointed with cement sand (1:4) reinforced with hoop iron every alternating course</u></b>				
C1	200mm thick walling reinforced as described	sm	72		

C2	Raking cutting to 200mm walling	lm	35		
C3	200mm thick to gable filing and parapet walls	sm	32		
	<b><u>Damp proof course Mastic asphalt or equal and approved laid on cement sand (1:4) bed on</u></b>				
C4	200mm wide	lm	30		
C5	150mm wide	lm	10		
C6	100mm diameter clay vent pipe 200mm long built through 200mm wall and covered with mosquito proof wire both ends (provisional)	No.	15		
	<b><u>2. Internal Walls</u></b>				
	<b><u>Machine dressed stone walling bedded and jointed with cement sand (1:4) reinforced with hoop iron every alternating course</u></b>				
C7	150mm thick walling	sm	36		
C8	100mm thick walling in toilet partitions(2.1m high)	sm	18.9		
	<b><u>Ring Beams and Lintels</u></b>				
C9	Insitu vibrated reinforced concrete (1:2:4) class 20/20mm in Ring Beams and/ Lintels. Rate to include for reinforcement bars, 4Y12 main bars and R8 links spaced 200mm C/C as per the SE's details.	cm	2.4		
	<b><u>Sawn formwork to:-</u></b>				
C10	Sides of beams	sm	24		
C11	Soffits of beams at opening	sm	2.7		
	<b><u>Suspended Slab</u></b>				
	<b><u>Rate to include for steel reinforcement</u></b>				
C12	Insitu vibrated reinforced concrete (1:2:4) class 20/20mm in suspended slab with Y10 reinforcement bars spaced 200mm c/c as per the SE's details	cm	1.2		
	<b><u>Sawn formwork to:-</u></b>				
C13	Soffit and sides of slab	sm	9.65		
	<b><u>Total For Super-structure Carried to Collection</u></b>				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b><u>3. ROOF CONSTRUCTION</u></b>				
	<b><u>Sawn celcured pressure impregnated second grade</u></b>				
	<b><u>cypress in accordance with CP 112</u></b>				
	<b><u>The following in various roof trusses including fabrication,</u></b>				
	<b><u>hoisting and fixing in position over 2000mm high</u></b>				
	<b><u>Frame</u></b>				

D1	75 x 50mm rafters	lm	54		
D2	75 x 50 mm: tie beam and timber members	lm	27		
D3	100 x 50mm wall plated fixed with and including hoop iron grounded in concrete at 1m centres	lm	40		
D4	55 x 50mm purlins (provisional)	lm	54		
D5	200 x 50mm ridge board	lm	9		
	<b>Roof covering</b>				
D6	Supplying 30 Gauge standard pre-painted galvanized corrugated Iron (G.C.I) roofing sheets covering, fixing to purlins, complete with approved nail caps etc, including all necessary curvatures, hoisting, placing and connections	sm	54		
D7	Ridge capping to match	m	9		
	<b>Finishes</b>				
D8	200 x 25mm Fascia Board	lm	32		
	<b>CEILING FINISHES</b>				
	<b>Celotex Board</b>				
D9	10mm thick T&G boards fixed to branderings (m/s) at 600mm centres	sm	30		
D10	250 x 50mm moulded T&G cornice plugged to masonry walling	lm	50		
	<b>Sawn cypress</b>				
D11	50x50mm branderings	lm	72		
D12	Ditto plugged to wall	lm	50		
	<b>Painting and Decorations</b>				
	<b>Prepare and apply three coats plastic emulsion paint internally on:-</b>				
D13	Fascia board	sm	30		
	<b>Rain water Goods</b>				
D14	Supply and install 150x200mm steel gutter G24 fixed onto fascia board with steel brackets at 1000mm c/c	m	20		
D15	Supply and mount 100mm GI downpipe with 600mm projection together with horse shoe	m	20		
	<b>Total For Roof Carried to Collection</b>				
	-				
	<b>4. BUILDING COMPLETION</b>				
	<b>MILD STEEL DOORS</b>				
	<b>Supply assemble and fix by the following purpose made standard section mild steel door to comply to B.S.990, obtained from an approved manufacturer</b>				
E1	Door overall size 900 x 2100mm with approved locks	No.	2		

	<b><u>FINISHING</u></b>				
E2	Prepare, prime with "Crown" or equal and approved zinc plumbate				
	primer and paint one undercoat and two gloss finishing coats of				
	"Crown Super Gloss" or equal and approved oil paint on surfaces of				
	metal doors externally (measured flat overall - both sides)	sm	3.78		
E3	Ditto internally (do.)	sm	3.78		
	<b><u>TIMBER DOORS</u></b>				
E4	50mm thick mahogany single leaf panel door comprising of 150 x 50mm stiles and rails filled with moulded hardwood panel as per SE's drawing, overall size 900 x 2100mm high together with approved locks	No.	10		
	<b><u>Wrot mahogany: prime grade</u></b>				
E5	150 x 50 mm Door frame: twice rebated: plugged	No.	10		
	<b><u>FINISHING</u></b>				
	<b><u>Painting and Decoration</u></b>				
E6	Prepare and apply one coat "Crown" or equal and approved aluminium wood primer before fixing on backs of wood surfaces in contact with masonry, concrete or plaster girth exceeding 200 but not exceeding 300mm	lm	30		
	<b>Prepare stain to approval with timber guard and apply three</b>				
	<b>coats matt "Crown Tuffseal" or other equal and approved</b>				
	<b>polyurethane varnish to woodwork to be executed by an</b>				
	<b>approved sub-contractor</b>				
E7	General surfaces of woodwork	sm	38		
E8	Surfaces girth exceeding 100mm but not exceeding 200mm	lm	50		
	<b><u>WINDOWS</u></b>				
	<b><u>Precast concrete</u></b>				
	<b><u>Approved clay cill: bedded and jointed in cement (sand (1:3) mortar: pointed in matching coloured cement</u></b>				
E9	150 x 25 mm Thick cill	lm	7		
	<b><u>Mild steel medium duty casement windows: custom made: including 25 x 3mm mild steel flat bar burglar proofing; sections patterns to SE's detail and approval: approved ironmongery: (glass m.s)</u></b>				
E10	Window overall size 600x600 high	No	10		
	<b><u>Supply and fix mild steel burglar proofing grilles fabricated from 20X20</u></b>				

	<b><u>mm square solid bars to patterns approved by the SE to:-</u></b>				
E11	Windows	sm	4.9		
	<b>GLAZING</b>				
E12	4mm Thick obscure ordinary quality sheet glass and glazing to metal with putty in panes not exceeding 0.50 square metres	sm	3.6		
	<b>FINISHING</b>				
E13	Prepare, prime with "Crown" or equal and approved zinc plumbate primer and paint one undercoat and two gloss finishing coats of "Crown Super Gloss" or equal and approved oil paint on surfaces of metal windows externally	sm	3.6		
E14	Ditto internally (do.)	sm	3.6		
	<b>Total For Building Completion Carried to Collection</b>				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>5. PAINTING &amp; PLASTERING</b>				
	<b>EXTERNAL WALL FINISHES</b>				
F1	Horizontal and vertical key pointing to machine cut masonry walling	sm	84		
	<b>Cement sand (1:4)</b>				
F2	12mm thick two coat render with wood float finish to walls and concrete surfaces	sm	21		
	<b>Prepare and apply three coats first grade exterior quality plastic emulsion paint on:-</b>				
F3	Rendered surfaces externally	sm	10.5		
	<b>INTERNAL WALL FINISHES</b>				
	<b>PLASTER AND PAINTWORK</b>				
F4	12mm (minimum) Two coat lime plaster comprising 9mm first coat of cement and sand (1:4) and 3mm second coat of cement and sand lime putty on walls finished smooth with a steel trowel on concrete or stone walls	sm	192		
	<b>COLOURED CERAMIC WALL TILES FIXED TO BACKING (MEASURED SEPARATELY) WITH AN APPROVED ADHESIVE ON ON WALLS AND POINTED WITH AND INCLUDING COLOURED ANTI FUNGAL CEMENT GROUT</b>				
F5	200 x 250 x 8mm Tiles	sm	59.4		
F6	Extra over wall tiles for coloured border tiles	lm	20		
	<b><u>The whole of the following to be executed by an approved</u></b>				



	<b><u>sub-contractor to Interior Designer's colour scheme</u></b>				
F7	Prepare and apply one undercoat and three coats of "Crown Solo" or equal and approved pure satin emulsion paint on plastered walls internally	sm	132.6		
	<b><u>INTERNAL FLOOR FINISHES</u></b>				
	<b><u>Cement and sand (1:4) Plaster and (1:3) screed on concrete</u></b>				
F8	25mm screed to receive tiles	sm	42		
F9	250 x 250 x 8mm Tiles Non skid cermaic tiles	sm	42		
	<b>Total For Building painting and plastering to collection page</b>				
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT</b>
	<b>6. ELECTRICAL INSTALLATION</b>				
	<i>Supply install, test and commission in accordance to BS 7671:1998, (cables as East African cables and accessories as Crabtree or equal approved) the following as described below:</i>				
G1	Supply and fix 6-way Consumer Unit with 6 No. MCBs as required complete with integral isolators	nr	1		
G2	Supply and lay 1.5 mm <sup>2</sup> single core cable Red, Black and Green/Yellow for internal and external lighting as East African cables or equal approved	m	200		
G3	Supply and lay 2.5 mm <sup>2</sup> single core cable Red, Black and Green/Yellow for heater and sockets as East African cables or equal approved	m	200		
G4	Supply and lay 25mm plastic conduit 4m long each	m	100		
G6	Supply and fix switchbox single	nr	14		
G9	Supply and fix switchbox twin	nr	100		
G10	Supply and fix switches as Crabtree or equal and approved as described:				
	a) One gang one way	nr	2		
	b) One gang two way	nr	1		
	c) Two gang two way	nr	1		
G11	Supply and fix ball fitting 20W, 240V, 50HZ energy saving bulbs	nr	11		
G12	Supply and fix 20W, 240V, 50HZ energy saving bulbs	nr	11		
G13	Supply and fix 5ft, 58W, 240V fluorescent fitting single with tube for:				

	a) External lighting	nr	2		
	b) Internal lighting	nr	2		
G14	Supply meter box with accessories	nr	1		
G15	Supply and fix double sockets	nr	2		
G17	Supply and fix water proof switches to IP65	nr	2		
G18	Supply and fix shower heads	nr	2		
	<b>Power Connection</b>				
G19	Allow for power connection from the main grid and related expenses.	Item	1		
G20	Add for contractor's profit	%			
	<b>Total for Electrical Installation carried to Collection page</b>				
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT</b>
	<b>7. PLUMBING WORKS</b>				
	<b>SANITARY FITTINGS</b>				
	Supply, delivery and install the following appliances including their support brackets, screws etc. where necessary items such as mastic, silicon, grouting etc. must be included in the rates. All connections to water supply, waste/soil drainage and electrical power supply are to be the responsibility of the contractor and must be priced for.				
	<b>NOTE: TRADE NAMES</b>				
	Where Trade Names are mentioned below, it is only intended to indicate the level of quality required. The tenderer MAY supply alternatives which must be approved in writing by the Project Manager/Engineer.				
	<b>Water Closet Suites</b>				
	"Twyford Bathrooms Ltd's Classic H.O. "Ref No.CC 1138 WH" White vitreous china, low level wash-down action with open flushing rim Squatting WC pan with horizontal outlet, fixing screws and mastic. WC pan to be complete with cistern as follows;				
H1	White vitreous china low level 6.0 litre cistern (Ref No.CC2648WH) with valve less cistern fittings including; syphon, ½ " side inlet, ball valve, ¾" side overflow, plastic flush-bend, fixing screws & brackets and chrome plated reversible lever. Heavy duty, plastic single ring seat and cover with	nr	8		

	plastic hinges (Ref No. ST 1302 WH).				
H2	WC "S" or "P" connector to drain pipe for horizontal outlet WC Pan as Twyford Bathrooms Ltd Ref.No.WF 1241 WH or WF 1240 WH.	nr	4		
	<b>Wash Hand Basins</b>				
H.3	"Twyford Bathrooms Ltd. "Sola 510" Wall mounted white vitreous china, 510x420mm basin with 1 taphole Ref. No.WB 2525 WH, complete with wall brackets (ref No. SR1315xx) for wall fixing.	nr	2		
H.4	"Eurobath" or approved equivalent, chrome plated ½" pillar tap.	nr	2		
H.5	"Eurobath" Ref. PEX KITA/CP chrome plated 1¼" basin waste complete with flange, shank, chain & plug.	nr	2		
H.6	"Eurobath" Ref: No. PEX 460- 1.¼ C/P chrome plated 1¼" bottle trap with tail pipe, cap - nut and wall flange.	nr	2		
	<b>Urinal</b>				
H.7	Supply and install a complete urinal set;stainless steel orifices over concrete slab urinal complete with fittings 4ft long, as directed by the engineer. Rate to include all related accessories and testing.	nr	1		
	<b>Shower Fittings</b>				
H.8	Supply and install 4 No. mounted soap dish. Rate to include fixing and making good affected areas.	nr	2		
H.9	Supply and install shower heads complete with support to the walls tpo hang approximately 2m from the ground floor	nr	2		
	<b>INTERNAL PLUMBING</b>				
H.18	Supply, deliver and install Galvanised Mid Steel (GMS) Class B and PPR Class D pipes to specification				
	<u>Tenderers must allow in their pipework prices for all the couplings, connectors, unions, nipples, sockets, endcaps, bridges, expansions loops, jointing materials etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, collars, holderbats plugged and screwed, and pipe sleeves and hacking along or through structural members. Also allow for connection to the existing network</u>				
H.19	18mm Nominal diameter G.I Class B pipe.	m	10		

H.20	18 mm Nominal diameter PPR Class D pipe	m	72		
H.22	Non-return valves	nr	6		
<b>PAGE TOTAL CARRIED FORWARD TO NEXT PAGE</b>					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SUB TOTAL BROUGHT FROM PREVIOUS PAGE</b>					
	<b>Gate Valves</b>				
H.23	20mm diameter high pressure screw-down fullway non-rising stem, solid wedge disc "Pegler" gate valve with wheel head and joints to steel tubing complete with matching diameter GMS union.	nr	2		
H.24	15mm diameter ditto	nr	6		
H.25	Excavate depth not exceeding 1.5m in soft rock for laying DN 18mm GI pipe (measured separately). Allow for backfilling, cart away of unnecessary materials to a point approx. 30m away	m	50		
	<b>Valve Chamber</b>				
H.26	Construct a masonry valve chamber of internal dimensions 300x300x350mm deep complete with precast cover.	nr	1		
	<b>Standpipe with hose tap</b>				
H.27	15mm diameter lockable lever type heavy duty threaded tap including stand pipe suitable for hose connection as "Bricon" or equal and approved. Include for excavation and connection to DN 18MM GI line	nr	2		
	<b>Roof tanks</b>				
H.28	Rotationally moulded polyethylene rectangular roof water storage tank of nominal capacity 5000 litres as 'KENTAINER' on bearing supports complete with cover.	nr	1		
	The tank is to be complete with the following;				
	a) 25mm diameter overflow				
	e) 32mm diameter washouts with gate valve				
	g) 25mm diameter outlet with gate valve				
	h) 20mm diameter inlet with high pressure float valve				
	i) Tank connectors for all incoming & outgoing pipes				
	<b>FOUL WATER DRAINAGE</b>				
	<u>Supply and fix uPVC soil system and MuPVC waste systems with screwed and socketed joints. Solvent welded joints shall be as per the systems manufacturer's written instructions.</u>				

	<u>Tenderers must allow in their pipework prices for all the couplings, connectors, bends, access plugs, joints etc as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed and for any associated builder's work such as plastering, cutting, chasing, drilling, making good etc. Also allow for pipe connections to foul water drains to engineer's detail including all accessories.</u>				
	<u>The installation must comply with BS EN 12056</u>				
	<b><u>uPVC Waste System Heavy Gauge Pipework</u></b>				
M.29	40mm diameter waste pipe	m	60		
M.30	50mm ditto	m	60		
M.31	100mm diameter Trapped Floor Gulley with cover, 40mm diameter inlets and 50mm diameter outlet.	nr	4		
M.32	Supply and lay at the recommended grade DN 100mm heavy duty waste water pipe. Include for cutting to the required sizes, jointing using jointing solvent, fixing into chambers ,any necessary wall /boring/hacking to pass through the pipe, all the pipe embedment works including embedment bortar,bends as may be necessary, fixing to the W.Cs, and fixing to the septic tank.	m	30		
	<b>Inspection Chambers</b>				
M.33	Allow excavation, concreting to Class 1:3:6, walling 150mm thick solid concrete block walls with 1:3 mortar and plastering to 1:2, Medium duty Rectangular Cover and Frame to specification for manhole not exceeding 1500mm depth.	nr	6		
M.34	100mm diameter cast iron Gulley Trap with concrete slab cover and 100mm diameter outlet	nr	8		
<b>PAGE TOTAL CARRIED FORWARD TO NEXT PAGE</b>					
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>SUB TOTAL BROUGHT FROM PREVIOUS PAGE</b>					
	<b>Excavation</b>				
M.35	Excavate trench for buried drain pipes not exceeding 1000mm and average 750mm deep, part return, fill in, ram and remainder cart away.	m	80		
	<b>Block signage</b>				

M.36	Allow for provision artwork ,design and engraving of ablution block label with details as directed by the engineer.Rate to include one one directional sign post ,fixing and mounting.	item	1		
	<b>EXTERNAL WATER CONNECTION</b>				
M.37	Excavate water line trench not exceeding 1.5m deep and width 0.6m	cm	45		
M.38	Supply and lay at the recommended grade one inch G.I water pipe. Include for cutting to the required sizes, jointing using jointing solvent, fixing into chambers ,any necessary wall /boring/hacking to pass through the pipe, all the pipe embedment works including embedment mortar, bends as may be necessary, fixing to the existing line and the new block.	m	50		
	<b>SEWER CONNECTION</b>				
5.03	Works setting out.	nr	10		
5.04	Excavations in soil for depth n.e 1.5 m	cm	9		
5.05	Ditto for depth 1.5 - 3.5m	cm	4		
5.06	Excavations in rock	cm	6		
5.08	Supply materials and lay 160mm diameter uPVC pipe with surround and haunching to the existing manhole	m	12		
	<b>Manholes</b>				
	Make good existing manhole to allow for new connection	item	1		
5.15	Provide for tie in works between the new works, existing sewer lines & existing buildings connections.	item	1		
	<b>Total For Plumbing Works Carried to Collection</b>				
	<b>GRAND SUMMARY</b>				
<b>ITEM</b>	<b>DESCRIPTION</b>				<b>AMOUNT KSHS.</b>
0	PRELIMINARY AND GENERAL REQUIREMENTS				
1	SUBSTRUCTURE				
2	SUPERSTRUCTURE				
3	ROOF COONSTRUCTION				

4	BUILDING COMPLETION		
5	PAINTING AND PLASTERING		
6	ELECTRICAL INSTALLATION		
7	PLUMBING WORKS		
	<b>SUBTOTAL 1</b>		
	ADD 5% CONTINGENCY		
	<b>SUBTOTAL 2</b>		
	ADD 16% VAT		
	<b>GRAND TOTAL</b>		

**APPENDIX TO FORM OF TENDER**

**(This appendix forms part of the tender)**

<b>CONDITIONS OF CONTRACT</b>	<b>CLAUSE</b>	<b>AMOUNT</b>
Tender Security (Bank Guarantee only)		Kshs100,000
Amount of Performance Security (Unconditional Bank Guarantee) or as modified in appendix to the instructions to tenderers	10.1	<del>10%</del> percent of Tender Sum in the form of Insurance bond (or as modified in appendix to the instructions to tenderers)
Program to be submitted	14.1	Not later than <b>30</b> days after issuance of Order to Commence
Cashflow estimate to be submitted	14.3	Not later than <b>30</b> days after issuance of Order to Commence
Minimum amount of Third Party Insurance	23.2	Kshs.1,000,000
Period for commencement, from the Engineer's order to commence	41.1	<b>14</b> days
Time for completion	43.1	<b>(Contractor to fill but not more than 180 days)</b> .....
Amount of liquidated damages	47.1	0.5% of the sum stated in the letter of Acceptance per day
Limit of liquidated damages	47.1	10 % of Contract Value
Defect Liability period	49.1	12 Months
Advance Payment	60.1	Shall <b>NOT</b> be granted
Percentage of Retention	60.5	<b>10%</b> of Interim Payment Certificate
Limit of Retention Money	60.3	<b>10</b> % of Contract Price
Minimum amount of interim certificates	60.2	Contract value/Time for completion in months
Time within which payment to be made after Interim Payment Certificate submitted to Engineer	60.8	90 days
Time within which payment to be made after Final Payment Certificate signed by Engineer	60.8	60 days
Appointer of Arbitrator	67.3	Chief Justice of The Republic of Kenya
Notice to Employer and Engineer	68.2	The Employers address is: County Secretary, Nairobi City County P.O.Box 30075 – 00100 NAIROBI

**Signature of Tenderer.....**

**Date.....**



