

BILLS OF QUANTITIES FOR THE PROPOSED CONSTRUCTION
OF A MULTIPUPOSE HALL
FOR KENYENYA
TTC

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	K.SHS
A B. C. D. E F	<u>PARTICULAR PRELIMINARIES</u> PRICING ITEMS OF PRELIMINARIES Prices SHALL BE INSERTED against items of “preliminaries” in the tenderer’s priced Bills of Quantities. The contractor is advised to read and understand all preliminary items. EMPLOYER The "Employer" is Kenya Teachers Training College The term "Employer" and "Kenya Teachers Training College" wherever used in the contract document shall be synonymous PROJECT MANAGER The term "P.M." wherever used in these Bills of Quantities shall be deemed to imply the Project Manager as defined in Condition 1 of the Conditions of Contract or such person or persons as may be duly authorised to represent him on behalf of the Government. ARCHITECT The term "Architect" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department for Public Works. Kisii County P.O. Box 590-40200. KISII. QUANTITY SURVEYOR The term "Quantity Surveyor" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department for Public Works. Kisii County P.O. Box 590-40200. KISII. ELECTRICAL ENGINEER The term "Electrical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department for Public Works. Kisii County P.O. Box 590-40200. KISII.	
	<i>Carried to collection</i>	

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ITEM	DESCRIPTION	K.SHS
A	MECHANICAL ENGINEER The term "Mechanical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department for Public Works. Kisii County P.O. Box 590-40200. KISII.	
B	STRUCTURAL ENGINEER The term "Structural Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is State Department for Public Works. Kisii County P.O. Box 590-40200. KISII.	
C	SCOPE OF THE CONTRACT The works includes : Construction of a Multipurpose Hall.	
D	DESCRIPTION OF THE WORKS Construction of a Multipurpose Hall to completion.	
E	MEASUREMENTS In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT MANAGER in accordance with Clause 22 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 22 of the said Conditions	
F	LOCATION OF SITE The site for works is located at Kenyenia Teachers Training College	
G	SIGNING OF THE TENDER DOCUMENTS The bidder shall append his / her signature and / or company's rubberstamp/ or serialize the pages on each and every page of tender	
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A	DEMOLITIONS AND ALTERATIONS The Contractor is to allow for all temporary protection required during the works including ordinary and special dust screens, hoardings, barriers, warning signs. etc as directed by the Project Manager and as necessary for the adequate propping and protection of existing property, finishes, workmen employed on the site, employer's agents and the public. Any damage or loss incurred due to the insufficiency of such protection must be made good by the Contractor. All protective devices are to be removed on completion of the works and any necessary making good consequent upon this is to be executed to the satisfaction of the Project Manager The works shall be propped, strutted and supported as necessary before any alteration or demolition work commences. Prices shall include for all cleaning and preparatory work to structure and finishes and for making good to all finishes on completion whether or not specifically described. Unless described as set aside for re-use all arising debris and surplus materials shall be carefully removed from building and carted away from The Contractor shall be entirely responsible for any breakage or damage which may occur to materials required for re-use during their removal unless it is certified by the Project Manager that such damage or breakage was inevitable as a result of the condition of the item concerned B CLEARING AWAY The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean and tidy state to the reasonable satisfaction of the Project Manager The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the Project Manager.	
	<i>Carried to collection</i>	-

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ITEM	DESCRIPTION	K.SHS
A	CLAIMS It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and / or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such a claim or intent to claim notice to the PROJECT MANAGER within the contract period. No claim shall be entertained upon the expiry of the said contract period	
B	PAYMENTS The tenderer's attention is drawn to the fact that the GOVERNMENT DOES NOT MAKE ADVANCE PAYMENTS but pays for work done and materials delivered on and off site: all in accordance with Clause 23 of the Conditions of Contract Agreement. In order to facilitate this, a list of the general component elements for the works is given at the summary page of these specifications and the tenderer is requested to break down his tender sum commensurate to the said elements	
C	PREVENTION OF ACCIDENT, DAMAGE OR LOSS The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deemed necessary by taking such care within the site.	
D	WORKING CONDITIONS The Contractor shall allow in his rates for any interference that he may encounter in the course of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the facility will be operating as usual during the course of the contract	
E	SIGNBOARD Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project Manager.	
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ITEM	DESCRIPTION	K.SHS
A LABOUR CAMPS The Contractor shall not be allowed to house labour on site. Allow for transporting workers to and from the site during the tenure of the contract. B MATERIALS FROM DEMOLITIONS Any materials arising from demolitions and not re-used shall become the property of the Ministry of Public Works. The Contractor shall allow in his rates the cost of transporting the demolished materials to Public Works Offices. Kisii County. C PRICING RATES The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract. D SECURITY The Contractor shall allow for providing adequate security for the works and the workers in the course of execution of this contract. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers. E URGENCY OF THE WORKS The Contractor is notified that these “ works are urgent” and should be completed within the period stated in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he/ she deems that he/she may incur by having to complete these works within the stipulated contract period. F PAYMENT FOR MATERIALS ON SITE All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the Contractor, nominated sub-Contractors and nominated suppliers. G EXISTING SERVICES Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.		
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ITEM	DESCRIPTION	K.SHS
A	BID SECURITY The Bidder shall furnish, as part of his bid, a security as specified in the tender advertisement. The bid security shall, at the bidder's option, be in the form of a certified cheque, bank draft, standby letter of credit or guarantee from a reputable bank located in Kenya or foreign bank which has been determined by the bidder to be acceptable to the Government. The format of the bank guarantee shall be in accordance with the sample forms of bid security included in the post qualification forms, other formats may be permitted, subject to the prior approval of the Government. Letters of credit, bank Guarantees issued as surety for the bid shall be valid for a period of One Hundred and Twenty Six (126) days from the date of Tender Opening. B PERFORMANCE BOND A bond of 5% of the contract sum will be required in accordance with clause 6.00 (as amended) on award of contract of the Instructions to Tenderer's. No payment on account for the works executed will be made to the contractor until he has submitted the Performance Bond to the Project Manager duly signed, sealed and stamped from an approved Bank. C TENDER DOCUMENTS Tender documents are as listed in Clause 2.1 of the Instruction to Tenderer's Page 9 D DELIVERY OF TENDER Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited at the offices as specified in the letter accompanying these documents or as indicated in the advertisement. Tenders will be opened at the time specified in the letter accompanying these Tender Documents or as indicated in the advertisement. Tenders delivered/received later than the above time will not be opened.	
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ITEM	DESCRIPTION	K.SHS
A	VALUE ADDED TAX The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1st September, 1993 which requires payment of VAT on all contracts. The Contractor should therefore include allowance in his rates and prices for prices for VAT and any other Government taxes currently in force NB: VAT SHALL be Included in the Contractor's Rates.	
B	FIRM PRICE CONTRACT Unless otherwise specifically stated, this is a firm price contract and the Contractor must allow in his tender rates for any increase in the cost of labour and/or materials during the currency of the contract.	
C	<u>PARTICULARS OF INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u> The following are the insertions to be made in the appendix to the Contract Agreement: - Period of Final Measurement 3 Months From Practical completion Defects Liability Period 6 Months from Practical completion Date for Possession To be agreed with the Project Manager Date for Completion from date of Possession Liquidated and Ascertained At the rate of 0.05% per day or part thereof Period of Interim Certificates Monthly Period of Honouring Certificates 30 days Percentage of Certified Value Retained 10% Advance payment Not applicable	
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ITEM	DESCRIPTION	K.SHS
	<u>COLLECTION</u> Brought forward from page PP/1 Brought forward from page PP/2 Brought forward from page PP/3 Brought forward from page PP/4 Brought forward from page PP/5 Brought forward from page PP/6 Brought forward from page PP/7	
	TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO GRAND SUMMARY	

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	AMOUNT
A.	GENERAL PRELIMINARIES PRICING ITEMS OF PRELIMINARIES AND PREAMBLES Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification. The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract. B. ABBREVIATIONS Throughout these Bills, units of measurement and terms are abbreviated and shall be all the requirements for the proper execution of the whole of the works in the Contract. <i>C.M.</i> Shall mean cubic metre <i>S.M.</i> Shall mean square metre <i>L.M.</i> Shall mean linear metre <i>MM</i> Shall mean Millimetre <i>Kg.</i> Shall mean Kilogramme <i>No.</i> Shall mean Number <i>Prs.</i> Shall mean Pairs <i>B.S.</i> - Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England. <i>Ditto</i> - Shall mean the whole of the preceding description except as qualified in the description in which it occurs. <i>m.s.</i> Shall mean measured separately. <i>a.b.d</i> Shall mean as before described.	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A.	EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT <i>Attendance ;</i> Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:- Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub- Contractors' work and being <i>Fix Only:-</i> "Fix Only" shall mean take delivery at nearest railway station (Unless otherwise stated),pay all demurrage charges, load and transport to site where necessary, unload, store,unpack, assemble as necessary, distribute to position. hoist and fix only. B FORM OF CONTRACT The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works(2000 Edition) included herein The Conditions of Contract are also included herein <i>Conditions of Contract</i> These are numbered from 1 to 37 as set out in pages 18 to 38 of these tender documents. Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these	
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ITEM	DESCRIPTION	AMOUNT
A	BOND. The Contractor shall find and submit on the Form of Tender an approved bank who will be willing to be bound to the Government in an amount equal to five per cent (5) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the PROJECT MANAGER and who will, when and if called upon, sign a Bond to that effect on the relevant standard form included herein. (without the addition of any limitations) on the same day as the Contract Agreement is signed, by the Government, the Contractor shall furnish within seven days another Surety to the approval of the	
B	PLANT, TOOLS AND VEHICLES Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work	
C	TRANSPORT. Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.	
D	MATERIALS AND WORKMANSHIP. All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also ensure they are onsite when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.	
	<i>Carried to collection</i>	-

ITEM	DESCRIPTION	AMOUNT
A	SIGN FOR MATERIALS SUPPLIED. The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking deliver thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the PROJECT MANAGER at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the PROJECT MANAGER	
B	STORAGE OF MATERIALS The Contractor shall provide at his own risk and cost where directed on the site weather proof lock-up sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the PROJECT MANAGER Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.	
C	SAMPLES The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the PROJECT MANAGER for his approval until such samples are approved by the PROJECT MANAGER and the PROJECT MANAGER, may reject any materials or workmanship not in his opinion to be up to approved samples. The PROJECT MANAGER shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the PROJECT MANAGER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Public Works. The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the PROJECT MANAGER The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A	GOVERNMENT ACTS REGARDING WORKPEOPLE ETC. Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps , passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.	
B	SECURITY OF WORKS ETC. The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public	
C	PUBLIC AND PRIVATE ROADS. Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the PROJECT MANAGER	
D	EXISTING PROPERTY. The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the PROJECT MANAGER	
	<i>Carried to collection</i>	-

ITEM	DESCRIPTION	AMOUNT
A	VISIT SITE AND EXAMINE DRAWINGS. The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered	
B	ACCESS TO SITE AND TEMPORARY ROADS. Means of access to the Site shall be agreed with the PROJECT MANAGER prior to commencement of the work and Contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges, or any other means of gaining access to the Site. Upon completion of the works, the Contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and reinstate all works and surfaces disturbed to the satisfaction of the PROJECT MANAGER The Contractor should also allow for relocating existing fence (approx. 30 metres long).	
C	AREA TO BE OCCUPIED BY THE CONTRACTOR The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the PROJECT MANAGER	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A OFFICE ETC. FOR THE PROJECT MANAGER The Contractor shall provide, erect and maintain where directed on site and afterwards dismantle the site office of the standard type, complete with furniture. He shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect and maintain a lock-up type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction of Government and Medical Officer of Health and shall provide services of cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be completed before the Contractor is permitted to commence the works. The Contractor shall make available on the Site as and when required by the "PROJECT MANAGER" a modern and accurate level together with levelling staff, ranging rods and 50 metre metallic or linen tape. B WATER AND ELECTRICITY SUPPLY FOR THE WORKS The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the PROJECT MANAGER . The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost. Nominated Sub--contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use. C SANITATION OF THE WORKS The Sanitation of the works shall be arranged and maintained by the Contractor to the satisfaction of the Government and/or Local Authorities. Labour Department and the PROIECT MANAGER		
	<i>Carried to collection</i>	-

ITEM	DESCRIPTION	AMOUNT
A	SUPERVISION AND WORKING HOURS The works shall be executed under the direction and to the entire satisfaction in all respects of the PROJECT MANAGER who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract.	
B	PROVISIONAL SUMS. The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement. Such sums are net and no addition shall be made to them for profit.	
C	PRIME COST (OR P.C.) SUMS. The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement. Persons or firms nominated by the PROJECT MANAGER to execute work or to provide and fix materials or goods are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.	
D	PROGRESS CHART. The Contractor shall provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors ; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds	
E	ADJUSTMENT OF P.C. SUMS. In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance"	
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ITEM	DESCRIPTION	AMOUNT
A	ADJUSTMENT OF P.C. SUMS. Ctd..... Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor.	
B	ADJUSTMENT OF PROVISIONAL SUMS. In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER's order added to the Contract Sum. Such work shall be valued as described for Variations, but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of	
C	NOMINATED SUB-CONTRACTORS When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".	
D	DIRECT CONTRACTS Notwithstanding the foregoing conditions, the Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A ATTENDANCE UPON OTHER TRADESMEN, ETC. The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills. B INSURANCE The Contractor shall insure as required in Clause 30 of the Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the PROJECT MANAGER either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the PROJECT MANAGER shall from time to time ascertain that premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the PROJECT MANAGER's inspection. C PROVISIONAL WORK All work described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the PROJECT MANAGER Immediately the work is ready for measuring, the Contractor shall give notice to the PROJECT MANAGER. If the Contractor makes default in these respects he shall if the PROJECT MANAGER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.		
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A	ALTERATIONS TO BILLS, PRICING, ETC. Any unauthorised alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.	
B	BLASTING OPERATIONS Blasting will only be allowed with the express permission of the PROJECT MANAGER in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the PROJECT MANAGER governing the use and storage of explosives	
C	MATERIALS ARISING FROM EXCAVATIONS Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the PROJECT MANAGER Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.	
D	PROTECTION OF THE WORKS. Provide protection of the whole of the works contained in the Bills of Quantities, including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the PROJECT MANAGER and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Government.	
E	REMOVAL OF RUBBISH ETC. Removal of rubbish and debris from the Buildings and site as it accumulates and at the completion of the works and remove all plant, scaffolding and unused materials at completion.	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A	WORKS TO BE DELIVERED UP CLEAN Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the PROJECT MANAGER	
B	GENERAL SPECIFICATION. For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads, Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.	
C	TRAINING LEVY The Contractor's attention is drawn to legal notice No. 237 of October, 1971, which requires payment by the Contractor of a Training Levy at the rate of 1/4 % of the Contract sum on all contracts of more than Kshs. 50.000.00 in value.	
D.	MATERIALS ON SITE All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the PROJECT MANAGER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
A	HOARDING The Contractor shall enclose all the site under construction with a hoarding 2400 mm high consisting of iron sheets gauge 30 on 100 x 50 mm 2nd grade treated sawn cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm 2nd grade treated sawn cypress timber rails. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.	
B	CONTRACTOR'S SUPERINTENDENCE/SITE AGENT The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Project Manager and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.	
C	SITE CLEARENCE AND RELOCATION OF SERVICES The contractor to allow a sum of money for general relocation of the underlying services as the sewer line, loading and carting away the wrakage, unservicable and metal scapes from site to an approved shown site one kilometre away from site as directed by the project manager	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT
	<u>COLLECTION</u> Brought Forward From Page GP/ 1 Brought Forward From Page GP/ 2 Brought Forward From Page GP/ 3 Brought Forward From Page GP/ 4 Brought Forward From Page GP/ 5 Brought Forward From Page GP/ 6 Brought Forward From Page GP/ 7 Brought Forward From Page GP/ 8 Brought Forward From Page GP/ 9 Brought Forward From Page GP/ 10 Brought Forward From Page GP/ 11 Brought Forward From Page GP/ 12 Brought Forward From Page GP/ 13	-
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY	

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<u>BILL NO. 1: DEMOLITION & ALTERATION</u> <u>Kindly note that prior visit to the site is mandatory</u> Carefully demolish the existing old dining hall structure, store and student council office; with and including relocation of services ; set aside the reusable materials for the Client, and cart away the arising debris all to the satisfaction of the Engineer		ITEM		
	TOTAL FOR DEMOLITION & ALTERATIONS FOR KENYENYA TTC CARRIED TO GRAND SUMMARY				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 2: MULTIPURPOSE HALL</u>				
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURE</u> <u>(All Provisional)</u>				
A	Clear site of all grass and small trees not exceeding 600mm girth and cart away or burn arisings	679	SM		
B	Excavate oversite to remove vegetable top soil average 150mm deep and cartaway to spoil heaps as directed on site	679	SM		
C	Mass Excavation to reduce level not exceeding 1.5m deep from stripped level and cart away	788	CM		
D	Excavate for foundation strip footing in normal soil not exceeding 1.5m deep from reduced level	11	CM		
E	Ditto; but for column bases	128	CM		
F	Excavate for foundation strip footing in normal soil depth exceeding 1.5m but not exceeding 3.0m from reduced level	0	CM		
G	Ditto; but for column bases	128	CM		
H	Return, fill and ram selected excavated material around foundations	224	CM		
J	Load, wheel and cart away from site surplus excavated material and deposit in approved dumping area	1536	CM		
K	Extra over all kinds of excavation for excavating in rock irrespective of class	26	CM		
L	Allow for keeping excavations free from all water by pumping or otherwise		Item		
M	Ditto; for plunking and strutting to sides of excavations		Item		
N	300mm Thick (average) approved broken quarry stone hardcore filling in two equal layers well rolled and compacted	526	SM		
P	Well compacted imported granular material fill to make up levels	549	CM		
Q	50mm thick stone dust blinding to surface of hardcore	526	SM		
	Carried to collection				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>Concrete works</u>				
	<i>50mm plain concrete mix (1:3:6 - class 15/20mm) blinding under:</i>				
A	Strip footing	7	SM		
B	Column Bases	86	SM		
	<i>Vibrated Reinforced Concrete mix (1:11/2:3) class 25/20mm in:</i>				
C	Strip footing	1	CM		
D	Column Bases	26	CM		
E	Columns	12	CM		
F	Ground Beam	20	CM		
G	Steps	1	CM		
H	150 mm thick floor bed	526	SM		
	<u>Mesh Fabric</u>				
J	Steel fabric mesh reinforcement type A142 weighing 2.22kg to BS 4483 with 150mm side laps (measured net-no allowance for laps)	670	SM		
	<i>Marine ply formwork to:-</i>				
K	Sides of strip footing	6	SM		
L	Sides of columns bases	80	SM		
M	Sides of columns	173	SM		
N	Sides of columns to 175mm radii	40	SM		
P	Ground beam	205	SM		
Q	Steps	2	SM		
R	Edges of ground floor bed exceeding 75mm but not exceeding 150mm wide	112	LM		
	<u>Masonry Works</u>				
S	200mm thick natural stone walling; quarry dressed bedded and jointed in cement sand(1:3) mortar; reinforced with hoop iron at alternate courses	267	SM		
	Carried to collection				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>Surface Treatment</u>				
A	Dragnet or other equal and approved antitermite insecticide treatment to blinded hardcore surfaces applied in accordance with manufacturer's instructions	526	SM		
	<u>Damp proofing</u>				
B	1000 gauge polythene sheeting laid under concrete floor bed	526	SM		
	<u>Reinforcement</u>				
	<i>Ribbed Steel Bars cold worked to BS 4461 including bends, hooks, tying wire, distance block and spacers</i>				
C	8mm diameter bars	1085	KG		
D	10mm diameter bars	35	KG		
E	12mm diameter bars	1114	KG		
F	16mm diameter bars	2843	KG		
	<u>Plinth</u>				
G	12 mm thick cement sand render mix 1:4 wood floated to plinth surfaces	50	SM		
H	Prepare and apply three coats bitumastic paint to rendered surfaces	50	SM		
	<u>Ramps</u>				
J	Reinforced concrete access ramp, approximately 2 m wide × 3 m long, complete with and including excavation, hardcore filling and compaction, 100mm thick concrete, reinforcement, formwork, terrazzo finish (m/s)	7	NO		
	Carried to collection				
	<u>COLLECTION</u>				
	Brought forward from page MH/1				
	Brought forward from page MH/2				
	Brought down from above				
	TOTAL FOR SUBSTRUCTURE CARRIED TO SUMMARY				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

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BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u> <u>WALLING</u> <u>External Wall</u> <i>Approved load bearing machine dressed natural stone walling; bedded and jointed in cement sand mortar mix 1:3; with hoop iron at every alternating course</i>				
A	200 mm thick walling	332	SM		
B	Ditto but gable walling	22	SM		
C	Eaves filling to 200mm walls; 300 mm average height	33	SM		
D	Raking cutting to 200mm thick wall	34	LM		
	<u>Internal walling</u> <i>Approved load bearing machine dressed natural stone walling; bedded and jointed in cement sand mortar mix 1:3; with hoop iron at every alternating course</i>				
E	200 mm thick walling	123	SM		
F	<u>Waterproofing</u> 200 mm wide Hessian based bituminous damp proof course bedded and jointed in cement sand mortar mix 1:3 under walling	214	LM		
	TOTAL FOR WALLING CARRIED TO SUMMARY				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELELMENT NO. 4</u> <u>ROOF CONSTRUCTION, COVERING AND RAIN WATER DISPOSAL</u> <u>The following in mild steel sections:including delivery of material to site;fabricating by way of bolting,weldin g or rivetting;priming with one coat of approved metal primer and 2 finishing coats of Crown gloss oil paint or other equal and approved and hoisting and fixing of members to any height not exceeding 7.0 meters in:</u>				
A	250 x 200 x 10mm MS plate with bolted onto the ring beam, complete with bolts	28	NO		
B	101.6 x 50.8 x 2mm Z-Section Purlins (3.64 Kg/M)	740	KG		
C	75 x 50 x 4mm RHS Rafters (7.34 Kg/M)	3000	KG		
D	40 x 40 x 3mm SHS Struts and Ties (3.48 Kg/M)	1309	KG		
E	200 x 3mm fascia and barge plate welded to edge of rafters	174	LM		
	<u>Roof Covering</u>				
F	28 gauge prepainted IT5 galvanised iron roofing sheets nailed on purlins;with one corrugation edge lap and 150mm end lap	563	SM		
G	Standared barrel half round ridge and hip cap to match 333mm girth	84	LM		
H	Form valleys in prepainted IT5 galvanised iron roofing sheets	24	LM		
	Carried to Collection				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Rainwater Goods</u>				
A	150mm diameter halfround UPVC gutters with and including plastic brackets at 1200mm centres	134	LM		
B	100mm diameter UPVC rain water downpipe fixed to wall with holder bats at 900mm centres	56	LM		
C	Extra over downpipe for swan neck projecting 600mm	15	NO		
D	Ditto shoe	15	NO		
	<u>Painting and Decorating</u>				
	<i>Prepare and apply one coat of zinc chromate metal primer and two finishing coats of gloss to:-</i>				
E	Surfaces exceeding 100 but not exceeding 200mm girth	174	LM		
	Carried to Collection				
	<u>COLLECTION</u>				
	Brought forward from page MH/6				
	Brought down from above				
	TOTAL FOR ROOF CONSTRUCTION CARRIED TO SUMMARY				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u>				
	<u>DOORS</u>				
A	Mild steel paneled double door overall size 1500x 2400mm high in 2No. equal leaves each leaf complete with 100x50x3mm RHS framing; comprising 300mm high section above the door leaf with louvred flat steel fins and covered in wire gauze; complete with metal lugs including purpose made hanging and locking accessories, glazing once primer before delivery to the site.	5	NO		
B	Ditto but single leaf door overall size 900 x 2400mm high	13	NO		
	<i>4 mm Thick one way glass and glazing to metal with glazing compound</i>				
C	Panes 0.1 to 0.5 square metres	6	SM		
	<u>Ironmongery</u>				
	<i>Supply and fix the following ironmongery as union or other equal and approved to steel with matching screws</i>				
D	Steel door 5 lever door lock; to double leaf door	5	NO		
E	Steel door 5 lever door lock	13	NO		
F	Medium-duty Flush bolts to top and bottom of inactive leaf	10	NO		
G	38mm diameter rubber door stopper plugged to floor	23	NO		
	<i>Touch up primer and apply one undercoat and two finishing coats of 1st quality supergloss paint to:-</i>				
H	General metal surfaces	92	SM		
	TOTAL FOR DOORS CARRIED TO SUMMARY				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 6</u>				
	<u>WINDOWS</u>				
	<i>Fine chiseled "Blue Njiru" stone walling in cement mortar</i>				
A	150 x 22mm cill, bedded and jointed in cement and sand 1:1 and pointed in coloured cement mortar	62	LM		
B	<i>Supply and fix double metal curtain rods from Challenge Engineering or other equal and approved comprising of 25mm diameter wrought iron front 16mm diameter rear rail complete with fixing brackets, curtain holding rings and decorative end stops and all necessary paintwork</i> Curtain rods	37	LM		
	<u>Casement</u>				
	<i>Supply, assemble and fix the following purpose-made mild steel casement windows casement complete with all opening accessories, 50 x 50mm thick frame units; including "snap on" 30mm wide permanent vent; building inlugs to jambs; plugging and screwing head and cill; bedding frames in waterproof cement mortar and pointing in approved mastic externally; fixing 4mm thick one way glass (m.s) oiling, easing and adjusting as described in the following overall sizes</i>				
C	1800 x 1200 mm high	14	NO		
D	1800 x 600 mm high; FIXED windows	11	NO		
E	900 x 1200 mm high	6	NO		
F	600 x 600 mm high	2	NO		
G	<i>Supply and fix galvanized mild steel roller shutter window overall size 2500 x 1200 mm high; comprising interlocking galvanized steel laths/slats, complete with side guides, top-mounted shutter box, bottom rail, brackets, locking mechanism and all necessary fittings, fixings and accessories, including preparation and finishing, complete and to Architect's approval</i>	2	NO		
H	<u>Glazing</u> 4 mm Thick one way sheet glass and glazing in panes 0.1 - 1.0sm with Putty compound	55	SM		
	<u>Painting and Decorating</u>				
	<i>Prepare and apply one undercoat and two finishing coats of 1st quality supergloss paint to:-</i>				
J	Surfaces exceeding 100 but not exceeding 200mm girth on window cill	62	LM		
K	<i>Touch up primer and apply one undercoat and two finishing coats of 1st quality supergloss paint to:-</i> Metal Casement surface girth over 300mm b.s.m	110	SM		
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7</u>				
	<u>FINISHES</u>				
	<u>WALL FINISHES</u>				
	<u>External Wall Finishes</u>				
A	Extra over natural stone walling for neat flush horizontal and vertical joints in coloured cement mortar <i>15 mm thick cement sand render mix 1:4 to:-</i>	332	SM		
B	Columns, beams,gables, door jambs, and window reveals <u>Painting and Decorating</u> <i>Prepare and apply one undercoat and two finishing coats of 1st quality exterior silk vinyl paint to:-</i>	239	SM		
C	General rendered surfaces <u>Internal Wall Finishes</u>	239	SM		
D	15 mm thick cement sand lime plaster mix 1:2:9 to wall and concrete surfaces including door jambs, and window reveals <u>Painting and Decorating</u> <i>Prepare and apply one undercoat and two finishing coats of 1st quality silk vinyl paint to:-</i>	888	SM		
E	General plastered surfaces of walls, beams, and columns <u>Wall tiles</u> <i>Cement and sand screed mix 1:3</i>	888	SM		
F	15 mm thick screed backing to wall finished with wood float to receive tiles <u>Coloured glazed ceramic wall tiles (washrooms)</u>	29	SM		
G	200 x 300 x 6mm as manufactured by "Saj ceramic" or other approved coloured tiles bedded and jointed in cement and sand 1:1 and pointed in coloured cement grouting	29	SM		
	Carried to collection				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	AMOUNT
	<u>FLOOR FINISHES</u>				
A	<i>Cement and sand screed mix 1:4</i> 32 mm thick Screed backing under floors finished with wood float to receive ceramic tiles	65	SM		
B	<u>Floor Tiles</u> 300 x 300 x 8mm thick ceramic floor tiles as manufactured by "SAJ CERAMICS Tiles" or other approved tiles fixed with approved adhesive	57	SM		
C	Ditto but non-slip floor tiles	8	SM		
D	100 mm high ditto skirting	77	LM		
E	<u>Terazzo</u> 20 mm thick cement sand screed mix 1:3 trowelled rough to receive terrazzo	509	SM		
F	20 mm thick polished white cement based terrazzo paving to floor polished smooth complete with and including 40 x 4 mm thick white plastic dividing strips	509	SM		
G	20 x 100 mm high skirting rounded top edge and cored junction with floor	137	LM		
H	Non slip carborundum inset to treads and ramps	119	LM		
J	<u>Grating</u> Supply and fix removable heavy-duty stainless-steel grating, Grade 304, to shallow kitchen drainage channel, comprising stainless-steel bearing bars and cross members securely welded to form rigid grating, including stainless-steel angle frame, supports, cutting, welding, grinding, polishing and fixing complete, all to Architect's approval	9	SM		
	<u>CEILING FINISHES</u>				
K	<u>Chipboard</u> 9mm thick chipboard ceiling lining with vee butt joints	64	SM		
L	Extra over ceiling lining for trap door size 600x600mm complete with necessary ironmongery and rebatted frame	3	NO		
M	100 x 25mm wrot cypress prime grade cornice with three labours; plugged <i>Sawn cypress, pressure impregnated as described in:-</i>	117	LM		
N	50x50mm brandering	295	LM		
P	75X50mm ditto plugging	117	LM		
	Carried to Collection				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	
	<u>Painting and Decorating</u>				
	<i>Prepare and apply one undercoat and two finishing coats of 1st quality silk vinyl paint to:-</i>				
A	Chipboard ceiling soffits	64	SM		
B	Surfaces not exceeding 100mm girth of cornice	117	LM		
	<u>Worktops</u>				
C	100mm thick plain concrete plinth under cabinets and to the top of cabinets	14	SM		
D	Steel fabric mesh reinforcement type A142 weighing 2.22kg to BS 4483 with 150mm side laps (measured net-no allowance for laps)	8	SM		
	<i>Marine ply formwork to:</i>				
E	Edges of slabs etc not exceeding 150mm high	22	LM		
F	Soffits of worktops	8	SM		
G	100 mm thick walling approved load bearing machine dressed natural stone walling; bedded and jointed in cement sand mortar mix 1:3; with hoop iron at every alternating course	4	SM		
H	15 mm thick cement sand lime plaster mix 1:2:9 to wall and concrete surfaces	13	SM		
	<i>Prepare and apply one undercoat and two finishing coats of 1st quality silk vinyl paint to:-</i>				
J	General plastered surfaces	13	SM		
	<i>Cement and sand screed mix 1:4</i>				
K	32 mm thick Screed backing to concrete plinth and dwarf walls	10	SM		
	<u>Coloured glazed ceramic wall tiles</u>				
L	200 x 300 x 6mm as manufactured by "SAJ CERAMICS" or other approved coloured tiles bedded and jointed in cement and sand 1:1 and pointed in coloured cement grouting to concrete plinths and dwarf walls externally	10	SM		
M	20mm thick polished natural granite worktop, including polished edges and fixing	8	SM		
N	Cabinets comprising suspended concrete worktop (m/s), MDF doors and drawers, blockboard shelves and divisions complete with all necessary accessories	12	SM		
	Carried to Collection				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		UNIT	RATE	
	<u>APRON AND COURTYARD</u>				
A	600x600x50mm thick precast concrete paving slabs; two rows on and including 50mm bed of fine sand jointed in cement mortar (1:4)	134	SM		
B	200mm thick hand packed hardcore filling well rammed and consolidated to make up levels	134	SM		
C	Dig over surfaces of filling of all configurations including clearing site off all vegetation and remove debris and large stones from site rake to bring to fine tilth	134	SM		
	Carried to Collection				
	<u>COLLECTION</u>				
	Brought forward from page MH/10				
	Brought forward from page MH/11				
	Brought forward from page MH/12				
	Brought down from Above				
	TOTAL FOR FINISHES CARRIED TO SUMMARY				
ITEM	DESCRIPTION		UNIT	RATE	
	<u>SUMMARY</u>				
A	Total for Substructure from page MH/3				
B	Total for RC Superstructure from page MH/4				
C	Total for Walling from page MH/5				
D	Total for Roof Construction from page MH/7				
E	Total for Doors from page MH/8				
F	Total for Windows from page MH/9				
G	Total for Finishes from page MH/12				
	TOTAL FOR KENYENYA TTC MULTIPURPOSE HALL CARRIED TO GRAND SUMMARY				

ELECTRICAL INSTALLATION WORKS FOR PROPOSED KENYENYA TTC MULTIPURPOSE HALL

SCHEDULE NO.1 - POWER AND LIGHTING.

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<u>BILL NO. 3 : ELECTRICAL WORKS</u>				
	Supply, install, test and commission the following :-				
	<u>LIGHTING POINTS</u>				
1.01	Lighting points wired in 1.5 mm ² SC CU cables drawn in concealed 20mm diameter HG P.V.C conduits for:-				
	a) one way switching	17	No.		
	b) two way switching	18	No.		
	c) unswitched.	13	No.		
	<u>SWITCHES</u>				
1.02	10Amps, switch plate as CLIPSAL, BG NEXUS or approved equivalent as				
	a) one gang one way	9	No.		
	b) one gang two way	4	No.		
	c) two gang one way	1	No.		
	c) two gang two way	3	No.		
	<u>LIGHTING FITTINGS</u>				
1.03	Lighting fittings complete with bulbs or tubes as follows:-				
	a) Type 1	7	No.		
	b) Type 2	20	No.		
	c) Type 3	9	No.		
	d) Type 4	8	No.		
	e) Type 5	4	No.		
	<u>SOCKET OUTLETS AND OTHER POWER POINTS</u>				
1.04	13 Amps socket outlet points wired ring comprising of 3x2.5 mm sq. single core PVC copper cables drawn in concealed 25mm HG PVC conduits and steel Trunking	24	No.		
1.05	13 Amps. Moulded plate switched socket outlet with neon indicator as BG, CLIPSAL or approved equivalent				
	a) twin.	24	No.		
SUB TOTAL C/F TO NEXT PAGE					

SCHEDULE NO. 1 CONT'D - POWER AND LIGHTING.

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	Supply, install, test and commission the following :-				
	SUBTOTAL B/F FROM PREVIOUS PAGE				
1.09	Cooker point comprising of 3x6mm ² PPCI Copper cables drawn in concealed 25mm dia. HG PVC conduits from CU	1	No		
1.11	Cooker control unit complete with 13 Amps. Switched socket outlet as TRONIC or approved equivalent.	1	No		
1.12	TV outlet plate complete with wiring in CO-AXIAL cable drawn in concealed HG PVC conduit	2	No.		
	<u>CONSUMER UNITS/DISTRIBUTION BOARDS</u>				
1.13	6 Ways TPN+E, flush mounted Distribution Board complete with 125A integral isolator as SCHNEIDER ELECTRIC or an approved equivalent complete with all accessories but ~~excluding~~ MCBs	1	No.		
	MCB's for item above				
	(a) 10A, SP	3	No.		
	(b) 20A, SP	5	No.		
	(c) 32A SP	6	No.		
	(d) 45A SP	1	No.		
	(e) Blanking plates	3	No.		
	<u>SUB-MAIN POWER DISTRIBUTION</u>				
1.14	Submains comprising 4Core 16 mm ² PVC/SWA/PVC CU Copper cables from sub-switch board to distribution board	35	LM		
	SUB TOTAL C/F TO SUMMARY PAGE PAGE				

SCHEDULE NO.2-LIGHTNING PROTECTION

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	Supply, install, test and commission the following ;-				
	<u>LIGHTNING PROTECTION</u>				
	<u>AIR TERMINATION</u>				
2	25x3mm copper tape including copper saddles at 1500mm intervals and bonding to water tanks and other metal work in the roof , all as FURSE	35	LM		
2.01	Copper air terminations (lightning arrestors) inclusive of base clamp and all fixing materials as FURSE	2	No.		
	<u>DOWNWARD CONDUCTOR</u>				
2.02	Downward conductor comprising 25mm x 3 mm thick bare copper tape as FURSE	12	LM		
2.03	Copper square tape clamp for making crossing tape joints	3	No.		
2.04	Steel conduits 32mm diam. for securing the down conductors complete with saddles	12	LM		
2.05	Test clamp as FURSE	2	No.		
	<u>EARTHING.</u>				
2.06	Earthing comprising of the following and any other necessary accessories:-				
	a) 15 mm x 1800 mm earth rod as FURSE cat. No. RB 105.	2	No.		
	b) 15 mm dia. Driving stud as FURSE cat.No. ST100.	2	No.		
	c) Rod to tape clamp as FURSE.	2	No.		
	d) Concrete inspection pit as FURSE cat. No.PT005. (or a well made 320mm x 320mmx 210 mm depth pit.)	1	No.		
	e) 25x3mm copper tape	12	LM		
	TOTAL FOR LIGHTNING PROTECTION C/F TO MAIN SUMMARY PAGE				

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

Item	Description	Amount(Kshs)
A	Sub total for- POWER AND LIGHTING	
B	Sub total for- LIGHTNING PROTECTION	
TOTAL FOR ELECTRICAL WORKS		

ITEM	LIGHTING FITTING	DESCRIPTION
		<i>(Lighting Fittings to be complete with all gears and accessories)</i>
1	Type 1	1200mm, 3120 lm, single 18W, 4000K LED Batten Luminaire as Tronic or equal and approved equivalent
2	Type 2	1200mm twin 36W LED Batten Luminaire complete with diffuser and appropriate dropdown as Tronic or equal and approved equivalent
3	Type 3	50W LED floodlight, IP65 as Tronic or equal and approved equivalent
4	Type 4	LED circular ceiling light 100mm surface mounted 10W, IP 54 as Tronic or approved equivalent
5	Type 5	Ceiling-mounted suspended self- contained double sided Exit sign 4W LED light for non-maintained emergency lighting for 3 hour duration made of Polycarbonate construction as Thorn Voyager or approved

**MECHANICAL BOQ FOR PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL AT
KENYENYA TTC**

Item	Description	Unit	Qty	Rate (KShs.)	Amount (KShs.)
A	<u>SANITARY FITTINGS</u> Supply, deliver, install, test and commission the following sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors. (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) Equivalent and Approved models may be acceptable. Accessible Water Closet- Close copouled Close-coupled WC suite ('S' or 'P'-trap) in approved colour complete with horizontal outlet to BS 3402 with 7.5 litre valveless low level ceramic cistern and fittings including siphon, 15mm diameter side inlet ball valve, 20mm diameter side overflow, plastic flush bend, dual flush system, inlet connection, chrome-plated lever and heavy plastic seat and cover with metal top fixed (chrome plated) hinges. All to be as TWYFORD wc pan water closet or equal approved	No.	1		
	Pedestal Wash Hand Basin Pedestal wash hand basin size 575 x 500mm with one tap hole, 32mm diameter chrome plated waste, pedestal, chrome plated non-conculsive time delay press action pillar tap and heavy duty plastic bottle trap (32mm 'P' trap) with 75mm seal; 2x Flexible connectors and 2x Angle Valves) To be asTwyfords "ADVENT 575" or equal and approved.				
	Total c/f to the next Page				

Item	Description	Unit	Qty	Rate (KShs.)	Amount (KShs.)
Total b/f from previous page					
A	Mirror 6mm thick polished dressing mirror with beveled edges, mounted on an appropriate impact absorption material of. Size: 450mmx600mm mounted on the wall. Mirror to be as "Impala" or approved	No	1		
B	Robe Hook Chrome plated double robe hook mounted with concealed screws. To be as Ideal Vado life and approved.	No	3		
C	Toilet Roll Holder Wall mounted, chrome plated toilet roll holder with protector plate as Vado life or equal and approved.	No	1		
D	Toilet Brush and Holder Toilet brush and holder as Vado life or equal and approved.	No	1		
E	Flexible Tubing & Angle Valve 15mm dia. x 300mm long flexible connectors complete with chrome plated angle valve.	NO	2		
F	Shower Fittings Concealed shower fitting consisting of 15mm chrome plated riser pipe to connect the concealed three way diverter single lever shower mixer as of Cobra Model "Trini TR 856" or approved equivalent for hot and cold water to a 100mm diameter swivel/ adjustable shower rose as Cobra model P-0681 CAT No. 101.001.78 or approved equivalent, shower arm and other necessary fittings and accessories. All to be as Cobra or equal and approved.	NO	1		
Total c/f to the next Page					

Item	Description	Unit	Qty	Rate (KShs.)	Amount (KShs.)
	Total b/f from previous page				
A	Soap Dish Semi recessed built in soap tray in vitreous china of size: 150 x 150mm in approved colour as Ideal Standard Model Cassara Cat No. 109.000.09 or equal and approved.	No	1		
B	Washroom signs Washroom Sign	No	1		
C	Shower Sign	No	1		
D	Commercial Double Sinks for KITCHEN Supply, install test and commission a16-gauge grade 304 stainless steel double-bowl kitchen catering sinks on robust structural iron frame legs with hot/cold swivel pillar mixers	No	4		
E	Plumbing and Drainage Connections Allow for connection of sanitary fittings and kitchen sinks to the plumbing and drainage pipework	Item	1		
	Total for Sanitary fittings and kitchen carried to summary page				

Item	Description	Unit	Qty	Rate (Kshs.)	Amount (Kshs.)
	WATER RETICULATION				
A	Roof Water tank Supply, deliver and install a Plastic water tank, capacity of tank to be 1000 litre and to be Rectangular Plastic Loft Tank of dimensions 186cm x 94cm x 65cm high. The tank to come complete with tank cover,air vent,mosquito proof inspection vent ,Valves, unions, connectors and to rest on a structural steel platform on ceiling	Item	1		
B	Supply and install 50mm diameter single orifice air valve, complete with pipe mounting accessories as 'Glenfield'.	No	1		
C	50mm diameter gate valve as 'Pegler'	No	1		
D	50mm diameter PPR pipework	Lm	12		
E	25mm diameter PPR pipework	Lm	20		
F	TEE 50X25X50	NO	2		
G	50mm dia.	NO	2		
H	ELBOW 50mm diametre elbow	NO	3		
I	25mm diametre elbow	NO	1		
Total c/f to the next Page					

Item	Description	Unit	Qty	Rate (KShs.)	Amount (KShs.)
	<i>Total b/f from previous page</i>				
	<u>Isolating Valves</u>				
A	25mm diameter approved medium pressure screw down full way non-rising stem wedge gate valve to BS 5154 PN 20 for series B rating, with wheel and head joints to steel tubing and complete with round male threaded transition fittings. The gate valve to be as PEGLER or approved equivalent.	NO	1		
B	Ditto 50mm	No	1		
	Ground Water Storage Tank (3,000L)				
C	Allow for the construction of the Reinforced concrete base slab (PLINTH)	Item	1		
D	Supply, deliver and install a Plastic water tank, capacity of tank to be 3000 litres and of preferred Dimensions 1550mm x 1500mm high. The tank to come complete with tank cover,air vent,mosquito proof inspection vent ,Valves, unions, connectors and to rest on a structural steel reinforced platform.	No	1		
E	Supply, deliver install, test and commission a 1.0 HP Booster Pump: Automatic electronic booster water pump with integrated digital pressure switches and automatic dry-run cutout protection	Item	1		
F	Valves & Ancillaries: Brass non-return check valves, Y-strainers, unions, and weather-proof outdoor electrical conduit wiring	item	1		
G	Standard precast concrete valve chamber of size 450 x 450 x 450mm	No	1		
	<i>Total for Water Reticulation carried to summary page</i>				

Item	Description	Unit	Qty	Rate (KShs.)	Amount (KShs.)
	INTERNAL PLUMBING				
	PPR Pipes 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. <u>PPR PN 20 PIPEWORK</u> A 20mm diameter pipework Lm 12 B 25mm diameter pipework Lm 12 C 32mm diameter pipework Lm 10 D 40mm diameter pipework Lm 10 <u>Bends</u> E 20mm diameter bend No. 7 F 25mm diameter bend No. 2 G 32mm diameter bend No. 2 H 40mm diameter bend No. 1 <u>Tees</u> I 20mm No. 4 J 25mm No. 2 K 32mm No. 3 L 25X20X25 No. 2 M 40x20x40 No. 2 N 40x25x40 No. 3 O 50mm diameter tee No. 1				
	Total c/f to the next Page				

Item	Description	Unit	Qty	Rate (Kshs)	Amount (Kshs)
	Total b/f from previous page				
	<u>Reducers</u>				
A	20 x 15mm diameter reducer	No.	14		
B	25 x 20mm diameter reducer	No.	3		
C	32x20mm diameter reducer	No.	2		
D	40x32mm diameter reducer	No.	2		
	50X20 mm diameter reducer	No.	2		
	50X40 mm diameter reducer	No.	2		
	<u>Male/Female Adapters</u>				
E	15mm brass threaded adapter	No.	14		
F	25mm brass threaded adapter	No.	4		
	<u>Valves</u>				
G	25mm gate valve	No.	2		
H	32mm gate valve	No.	1		
I	40mm gate valve	No.	1		
J	Excavate trench 300mm wide and 500mm deep to lay plumbing pipes.	LM	10		
K	Allow for water connection for plumbing	Item	1		
	<u>Unions</u>				
L	25mm diameter pipe union	No.	2		
M	32mm diameter pipe union	No.	2		
N	40mm diameter pipe union	No.	2		
	TOTAL FOR INTERNAL PLUMBING TO SUMMARY				

FOUL WATER INTERNAL DRAINAGE					
Item	Description	Unit	Qty	Rate (Kshs)	Amount (Kshs)
	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 svstem.				
	<u>MuPVC, uPVC Waste & Soil pipework</u>				
A	100mm diameter heavy gauge grey mPVC pipe	Lm	6		
B	100mm diameter heavy gauge brown mPVC pipe	Lm	50		
C	75mm diameter waste pipe	Lm	12		
D	50mm diameter waste pipe	Lm	6		
E	40mm diameter waste pipe	Lm	6		
	<u>Tee</u>				
F	50mm tee with access	NO	4		
	<u>Bends</u>				
G	100mm diameter long radius bend	NO	4		
H	100mm diameter short radius bend	NO	4		
I	100mm diameter access bend	NO	2		
J	100mm diameter sweep bend	NO	2		
K	40mm diameter sweep bend	NO	4		
	<u>Floor Traps</u>				
L	100x50mm dia floor trap & grating	NO	2		
	<u>Gulley traps</u>				
M	Standard 300 x 300 mm gulley trap chamber complete with concrete cover and plastic trap with 100mm seal.	NO	5		
Total c/f to the next Page					

Item	Description	Unit	Qty	Rate (Kshs)	Amount (Kshs)
	Total b/f from previous page				
A	Grease trap Supply, deliver and install hydromechanical grease trap, 50 GPM capacity, 80 gal (≈300 L), stainless steel body, complete with inlet/outlet connections, baffles, and FRP access cover, tested for compliance	NO	1		
B	<u>Inspection Chamber and Covers</u> 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'.	NO	8		
C	Excavation Excavate trench in soil/murram for above pipes not exceeding 2000mm deep, part return in, fill, ram and surplus cart away.	LM	72		
D	100mm dia WC connector	No.	1		
E	Cowl vent & weathering slate fitted to specification	Item	2		
F	Supply and Installation of 1m3 HDPE Biodigester(factory-molded, prefabricated type)	No.	1		
G	Allow for construction of soak pit	item	1		
H	Allow sum for sealing and connection to functionality	Lot.	1		
I	Allow sum for excavation and backfilling with approved material.	Lot.	1		
J	Testing and commissioning of all the sanitary fittings to the satisfaction of the engineer	Item	1		
	TOTAL FOR FOUL WATER TO SUMMARY PAGE				

Item	Description	Unit	Qty	Rate (Kshs)	Amount (Kshs)
	Supply, deliver, install and mount Fire Extinguishers complete with wall brackets, signage. commissioning				
A	Dry Chemical Powder Fire Extinguisher Dry Powder Fire Extinguisher 9kg - ABC Dry Powder, stored pressure type, BS EN 3 certified, with pressure gauge, hose, wall bracket - For Class A,B,C fires - Brand: Fireguard / Britannia	No	2		
B	Fire Blanket Fire blanket made of cloth woven with pre-asbestos yarn or any other fire proof material and to measure 1800 x 1210 mm. It shall be fitted with special tapes folded so as to offer instantaneous single action to release blanket from storing jacket to BS 1721.	No.	1		
C	Carbon Dioxide Carbon Dioxide (CO2) Fire Extinguisher 5kg - BS EN 3 - with horn and hose - For Electrical fires	No	2		
D	Foam fire Extinguisher Foam Fire Extinguisher 9Ltrs (9kg) - AFFF Foam, stored pressure, BS EN 3, for Class A & B (Oil) - with wall bracket	No	1		
E	Water Fire Extinguisher Water Fire Extinguisher 9Ltrs (9kg) - Stored pressure, BS EN 3, for Class A - with wall bracket	No	2		
F	Signage Fire Extinguisher location signs -photoluminescent 200x300mm	No	5		
Total for fire Fighting works Carried to Summary Page					

SUMMARY PAGE		
	Description	Amount (Sh.)
A	Total for sanitary fittings and kitchen sinks	
B	Total for Water Reticulation	
C	Total for Internal Plumbing	
D	Total for Foul Water	
E	Total for fire fighting	
F	Allow a provisional sum of Ksh one hundred and fifty thousand only; for contingency to be used as directed by the Mechanical Engineer	150,000.0
	Total for Mechanincal Works carried forward to the Main Summary Page	

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

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BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	BILL NO. 6 : PROVISIONAL SUMS Allow a provisional sum of Four Hundred and Fifty Thousand Kenya Shillings only (KSh 450,000) for Project Supervision by State Department for Public Works Staff.	SUM			450,000.00
B	Allow a provisional sum of Eight Hundred Thousand Kenya Shillings only (ksh 800,000/-) for Contigencies to be expended only upon the written instruction of the Project Manager	SUM			800,000.00
C	Allow a provisional sum of Seventy Five Thousand Kenya Shillings only (ksh 75,000/-) for Material Testing by the Materials Department	SUM			75,000.00
TOTAL FOR PROVISIONAL SUMS FOR KENYENYA TTC CARRIED TO GRAND SUMMARY					Ksh1,325,000.00

BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC

ITEM	DESCRIPTION		PAGE		AMOUNT
	<u>GRAND SUMMARY</u>				
A	TOTAL FOR PARTICULAR PRELIMINARIES		PP/8		
B	TOTAL FOR GENERAL PRELIMINARIES		GP/ 14		
C	TOTAL FOR DEMOLITION AND ALTERATIONS		DA/1		
D	TOTAL FOR MULTIPURPOSE HALL		ND/13		
E	TOTAL FOR ELECTRICAL WORKS		EW/4		
F	TOTAL FOR MECHANICAL WORKS		MW/12		
G	TOTAL FOR PROJECT MANAGER'S STATIONERY		PMS/1		
H	TOTAL FOR PROVISIONAL SUMS		PS/1		1,325,000.00
SUB TOTAL FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC					
	<u>ADD PPRA LEVY @ 0.03%</u>				
<u>GRAND TOTAL FOR THE PROPOSED CONSTRUCTION OF A MULTIPURPOSE HALL FOR KENYENYA TTC (INCLUSIVE OF ALL GOVERNMENT TAXES) CARRIED TO FORM OF TENDER</u>					
	Contract period(weeks) Amount in words Tenderers Name Address Signature Date.....				