



REPUBLIC OF KENYA



## COUNTY GOVERNMENT OF NYANDARUA

DEPARTMENT OF ROADS, TRANSPORT, ENERGY AND PUBLIC WORKS

PROPOSED CONSTRUCTION OF A MORGUE AT NDARAGWA

FOR

DEPARTMENT OF HEALTH SERVICES

### BILLS OF QUANTITIES

ARCHITECT,  
COUNTY ARCHITECT,  
DIR. OF PUBLIC WORKS,  
NYANDARUA COUNTY,  
P.O. BOX 701-20303,  
OL KALOU

QUANTITY SURVEYOR,  
COUNTY QUANTITY SURVEYOR,  
DIR. OF PUBLIC WORKS,  
NYANDARUA COUNTY,  
P.O. BOX 701-20303,  
OL KALOU

ELEC/MECH ENGINEER  
COUNTY ELEC / MECH. ENGINEER,  
DIR. OF PUBLIC WORKS,  
NYANDARUA COUNTY,  
P.O. BOX 701-20303,  
OL KALOU

STRUCTURAL ENGINEER,  
COUNTY ENGINEER - STRUCTURAL  
DIR. OF PUBLIC WORKS,  
NYANDARUA COUNTY,  
P.O. BOX 701-20303,  
OL KALOU

JANUARY, 2026



# **PARTICULAR PRELIMINARIES**

ITEM	DESCRIPTION	AMOUNT
	<p><b><u>PARTICULAR PRELIMINARIES</u></b></p> <p><b>A PRICING ITEMS OF PRELIMINARIES</b> Prices <b>SHALL BE INSERTED</b> against items of “preliminaries” in the tenderer’s priced Bills of Quantities. The contractor is advised to read and understand all preliminary items.</p> <p><b>B DESCRIPTION OF THE WORKS</b> The works to be carried out under this contract involves; construction of a morgue,landscaping work and septic tank and foul drainage.</p> <p><b>C MEASUREMENTS</b> 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.</p> <p><b>D LOCATION OF SITE</b>  The Site is located at Nyandarua County. The Contractor is advised to visit the site, to familiarize with the nature and position of the site. No claims arising from the Contractor’s failure to do so will be entertained.</p> <p><b>E SIGNING OF THE TENDER DOCUMENTS</b>  The bidder shall append his / her signature and / or company’s rubber stamp on each and every page of tender document.</p> <p><b>F CLEARING AWAY</b> 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.</p>	
	<b>Carried to collection</b>	

ITEM	DESCRIPTION	AMOUNT
A	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.	
B	<p><b>CLAIMS</b></p> <p>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 contact period.</p>	
C	<p><b>PAYMENTS</b></p> <p>The tenderer's attention is drawn to the fact that the GOVERNMENT IS ALLOWED TO MAKE ADVANCE PAYMENTS ONLY on production of an approved bank guarantee and also pays for work done and materials delivered to 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</p>	
D	<p><b>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</b></p> <p>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 deems necessary by taking such care within the site.</p>	
	<b>Carried to collection</b>	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>WORKING CONDITIONS</b></p> <p>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 offices will be operating as usual during the course of the contract.</p>	
B	<p><b>SIGNBOARD</b></p> <p>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.</p>	
C	<p><b>LABOUR CAMPS</b></p> <p>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.</p>	
	Carried to collection	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>CONTRACT COMPLETION PERIOD</b></p> <p>The contract completion period in accordance with condition 31 of the Conditions of contract must be adhered to.</p> <p>The 'PROJECT MANAGER' shall strictly monitor the Contractors progress in relation to the progress chart and should it be found necessary the 'PROJECT MANAGER' shall inform the Contractor in writing that his actual performance on site is not satisfactory .In all such cases the Contractor shall accelerate his rate of performance production and progress by all means such as additional labour,plant,and working overtime all at his cost.e.t.c</p>	
B	<p><b>PERFORMANCE BOND</b></p> <p>A bond of 5% of the contract sum will be required in accordance with clause 28 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.</p>	
C	<p><b>TENDER DOCUMENTS</b></p> <p>Tender documents are as listed in Clause 2.1 of the Instruction to</p>	
D	<p><b>DELIVERY OF TENDER</b></p> <p>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 advertisement.</p> <p>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.</p>	
	<b>Carried to collection</b>	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>VALUE ADDED TAX</b></p> <p>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 for V.A.T and other Government taxes currently in force for all his rates, provisional items and prime cost sums in this tender</p>	
	Carried to collection	

ITEM	DESCRIPTION	AMOUNT
A	<p>The tenderer is advised that in accordance with Government public notice No. 35 &amp; 36 Dated 11th September 2003 operational from 1st October 2003, VAT will be deducted against the contract sum at the prevailing rate by the Employer and remitted directly to the Commissioner of VAT through all interim certificates. It should however be noted that this is not additional tax but a new mode of payment for VAT, any excess payment will be refundable once the Contractor has submitted monthly returns to the Commissioner of VAT who will do the refunds when satisfied that the VAT regulations have been complied with.</p> <p>NB: The tenderer shall include the V.A.T. at the <b>grand summary page</b></p>	
B	<p><b>TRANSPORT FOR OFFICERS</b>  Allow Kenya Shillings thirty thousand (Kshs 30, 000.00) only for fuel for the Project Manager's vehicle to and from the site of the works</p> <p>Allow for Contractor's profit and overheads ( .....%)</p>	
C	<p><b><u>PROJECT MANAGERS EXPENSES</u></b></p> <p>Provide a provisional sum of Kenya Shillings thirty thousand (Kshs 30,000.00) only for Clerk of works expenses</p> <p>Allow for Contractor's profit and overheads (.....%)</p> <p>Provide a provisional sum of Kenya Shillings five thousand (Kshs 5,000.00) only for project managers stationery.</p> <p>Allow for Contractor's profit and overheads ( .....%)</p> <p>The following are the insertions to be made in the appendix to the Contract Agreement: -</p>	
	<b>Carried to collection</b>	-

ITEM	DESCRIPTION	AMOUNT
	<u>INSERTIONS TO THE CONTRACT</u>	
	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 ..... Weeks from date of Possession	
	Liquidated and Ascertained damages At the rate of Ksh..... per week or part thereof	
	Prime cost sums for which the Contractor desires to tender	
	Period of Interim Certificates	
	Percentage of Certified Value Retained 10%	
	Limit of Retention Fund 10%	

ITEM	DESCRIPTION	AMOUNT
	<u>COLLECTION</u>	
	Brought forward from page PPR / 1	
	Brought forward from page PPR / 2	
	Brought forward from page PPR / 3	
	Brought forward from page PPR / 4	
	Brought forward from page PPR / 5	
	Brought forward from page PPR / 6	
	Brought forward from page PP R/ 7	
	<b>TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO MAIN SUMMARY</b>	



# **GENERAL PRELIMINARIES (BILL 2)**

ITEM	DESCRIPTION	AMOUNT
A	<p><b>GENERAL PRELIMINARIES</b></p> <p><b>PRICING ITEMS OF PRELIMINARIES AND PREAMBLES</b></p> <p>Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>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.</p>	
B	<p><b>ABBREVIATIONS</b></p> <p>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.</p> <p>C.M.                      Shall mean cubic metre</p> <p>S.M.                      Shall mean square metre</p> <p>L.M.                      Shall mean linear metre</p> <p>MM                        Shall mean Millimetre</p> <p>Kg.                        Shall mean Kilogramme</p> <p>No.                        Shall mean Number</p> <p>Prs.                        Shall mean Pairs</p> <p>B.S. - Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p><i>Ditto</i> - Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p><i>m.s.</i>                      Shall mean measured separately.</p> <p><i>a.b.d</i>                      Shall mean as before described.</p>	
	Carried to Collection	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</b></p> <p><i>Attendance</i> ; Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:-</p> <p>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 responsible for the accuracy of the same.</p> <p><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.</p>	
B	<p><b>EMPLOYER</b></p> <p>The "Employer" is the COUNTY GOVERNMENT OF NYANDARUA</p> <p>The term "Employer" and "EACC" wherever used in the contract document shall be synonymous</p>	
C	<p><b>PROJECT MANAGER</b></p> <p>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. In this contract the project manager is the DIRECTOR PUBLIC WORKS NYANDARUA COUNTY P.O. Box 701 - 20303, OL KALOU.</p>	
D	<p><b>ARCHITECT</b></p> <p>The term "Architect" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is the COUNTY ARCHITECT - Nyandarua County, P.O. Box 701 - 20303, OL KALOU.</p>	
<b>Carried to Collection</b>		

ITEM	DESCRIPTION	AMOUNT
A	<p><b>QUANTITY SURVEYOR</b></p> <p>The term "Quantity Surveyor" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is the COUNTY QUANTITY SURVEYOR - Nyandarua County, P.O. Box 701 - 20303, OL KALOU.</p>	
B	<p><b>ELECTRICAL ENGINEER</b></p> <p>The term "Electrical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is the COUNTY ELECTRICAL ENGINEER - Nyandarua County, P.O. Box 701 - 20303, OL KALOU.</p>	
C	<p><b>MECHANICAL ENGINEER</b></p> <p>The term "Mechanical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is the MECHANICAL WORKS - Nyandarua County, P.O. Box 701 - 20303, OL KALOU.</p>	
D	<p><b>STRUCTURAL ENGINEER</b></p> <p>The term "Structural Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is the STRUCTURAL ENGINEER - Nyandarua County, P.O. Box 701 - 20303, OL KALOU.</p>	
E	<p><b>FORM OF CONTRACT</b></p> <p>The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works (Revised 2006 Edition) included herein</p> <p>The Conditions of Contract are also included herein</p> <p><i>Conditions of Contract</i></p> <p>These are as set out in these tender documents.</p> <p>Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities</p>	
<b>Carried to Collection</b>		

ITEM	DESCRIPTION	AMOUNT
A	<p><b>PERFORMANCE BOND.</b></p> <p>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 Government.</p>	
B	<p><b>PLANT, TOOLS AND VEHICLES</b></p> <p>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.</p>	
C	<p><b>TRANSPORT.</b></p> <p>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.</p>	
D	<p><b>MATERIALS AND WORKMANSHIP.</b></p> <p>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.</p>	
E	<p><b>SIGN FOR MATERIALS SUPPLIED.</b></p> <p>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</p>	
	<b>Carried to Collection</b>	-

ITEM	DESCRIPTION	AMOUNT
A	<p><b>STORAGE OF MATERIALS</b></p> <p>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</p>	
B	<p><b>SAMPLES</b></p> <p>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 Department of public works,Roads,transport,housing and Energy.</p> <p>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.</p>	
C	<p><b>GOVERNMENT ACTS REGARDING WORKPEOPLE ETC.</b></p> <p>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.</p> <p>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,</p>	
D	<p>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.</p>	
<b>Carried to Collection</b>		

ITEM	DESCRIPTION	AMOUNT
A	<p><b>SECURITY OF WORKS ETC.</b></p> <p>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.</p>	
B	<p><b>PUBLIC AND PRIVATE ROADS.</b></p> <p>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</p>	
C	<p><b>EXISTING PROPERTY.</b></p> <p>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</p>	
D	<p><b>VISIT SITE AND EXAMINE DRAWINGS.</b></p> <p>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.</p>	
E	<p><b>ACCESS TO SITE AND TEMPORARY ROADS.</b></p> <p>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).</p>	
<b>Carried to Collection</b>		

ITEM	DESCRIPTION	AMOUNT
A	<p><b>AREA TO BE OCCUPIED BY THE CONTRACTOR</b></p> <p>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</p>	
B	<p><b>OFFICE ETC. FOR THE PROJECT MANAGER</b></p> <p>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.</p>	
C	<p><b>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</b></p> <p>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.</p>	
	<b>Carried to Collection</b>	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>SUPERVISION AND WORKING HOURS</b></p> <p>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.</p>	
B	<p><b>PROVISIONAL SUMS.</b></p> <p>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.</p>	
C	<p><b>PRIME COST (OR P.C.) SUMS.</b></p> <p>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.</p>	
D	<p><b>PROGRESS CHART.</b></p> <p>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.</p>	
E	<p><b>ADJUSTMENT OF P.C. SUMS.</b></p> <p>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"</p>	
<b>Carried to Collection</b>		

ITEM	DESCRIPTION	AMOUNT
A	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	<p><b>ADJUSTMENT OF PROVISIONAL SUMS.</b></p> <p>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 Quantities for similar items added.</p>	
C	<p><b>NOMINATED SUB-CONTRACTORS</b></p> <p>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".</p>	
D	<p><b>DIRECT CONTRACTS</b></p> <p>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.</p>	
B	<p><u>Project Management</u></p> <p>Allow a Provisional Sum of Kenya Shillings three hundred thousands (300,000.00) for Project managers supervisory expenses.</p>	300000

ITEM	DESCRIPTION	AMOUNT
A	<p><b>ATTENDANCE UPON OTHER TRADESMEN, ETC.</b>  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</p>	
B	<p><b>SANITATION OF THE WORKS</b>  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 PROJECT MANAGER</p>	
	Carried to Collection	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>INSURANCE</b></p> <p>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.</p>	
B	<p><b>PROVISIONAL WORK</b></p> <p>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.</p>	
C	<p><b>ALTERATIONS TO BILLS, PRICING, ETC.</b></p> <p>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.</p>	
D	<p><b>BLASTING OPERATIONS</b></p> <p>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.</p>	
<b>Carried to Collection</b>		

ITEM	DESCRIPTION	AMOUNT
A	<p><b>MATERIALS ARISING FROM EXCAVATIONS</b></p> <p>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.</p>	
B	<p><b>PROTECTION OF THE WORKS.</b></p> <p>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.</p>	
C	<p><b>REMOVAL OF RUBBISH ETC.</b></p> <p>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.</p>	
D	<p><b>WORKS TO BE DELIVERED UP CLEAN</b></p> <p>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</p>	
E	<p><b>GENERAL SPECIFICATION.</b></p> <p>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.</p>	
	<b>Carried to Collection</b>	

ITEM	DESCRIPTION	AMOUNT
A	<p><b>TRAINING LEVY</b></p> <p>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.</p>	
B	<p><b>MATERIALS ON SITE</b></p> <p>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.</p>	
C	<p><b>HOARDING</b></p> <p>The Contractor shall enclose all the areas under construction with approved material to the satisfaction of the PROJECT MANAGER</p>	
D	<p><b>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</b></p> <p>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.</p>	
	<b>Carried to Collection</b>	

ITEM	DESCRIPTION	AMOUNT
	<p style="text-align: center;"><u>COLLECTION</u></p> <p>Brought Forward From Page GPR/ 1</p> <p>Brought Forward From Page GPR/ 2</p> <p>Brought Forward From Page GPR/ 3</p> <p>Brought Forward From Page GPR/ 4</p> <p>Brought Forward From Page GPR/ 5</p> <p>Brought Forward From Page GPR/ 6</p> <p>Brought Forward From Page GPR/ 7</p> <p>Brought Forward From Page GPR/ 8</p> <p>Brought Forward From Page GPR/ 9</p> <p>Brought Forward From Page GPR/ 10</p> <p>Brought Forward From Page GPR/ 11</p> <p>Brought Forward From Page GPR/ 12</p> <p>Brought Forward From Page GPR/ 13</p>	
	<b>TOTAL FOR GENERAL PRELIMINARIES CARRIED TO GRAND SUMMARY</b>	



# **BUILDER'S**

Item	Description	Unit	Qty	Rate	Amount
	<b><u>ELEMENT NO 1</u></b> <b><u>SUBSTRUCTURES (ALL PROVISIONAL)</u></b>				
	<b><u>Site Preparation</u></b>				
A	Clear site of bushes, scrub, undergrowth and cut down small trees not exceeding 600mm girth and grub up roots : burn on site or load and remove from site as directed.	SM	750		
	<b><u>Excavations</u></b>				
B	Excavate to reduce levels in final trimming and levelling: commencing from formation levels 300mm deep.	SM	750		
C	Excavate to reduce levels sandy clay soils ; not exceeding 1.5 metres deep commencing from stripped levels.	CM	1125		
D	Excavate pits for foundation trenches : commencing from stripped level ; not exceeding 1500mm high.	CM	558		
E	Excavate pits for column bases: ditto.	CM	11		
F	Excavate pits for foundation trenches : commencing from 1500mm to 3000mm deep	CM	558		
G	Excavate pits for column bases: ditto.	CM	11		
H	Extra over excavation for excavating in hard murrum and hardrock all classes.	CM	171		
	<b><u>Disposal of Excavated materials</u></b>				
I	Backfill and compact in layers : selected imported Approved material around foundations :placed in 200mm thick layers : well watered and compacted to 95% MDD	CM	877		
J	Ditto: in filling to make up levels under floor slab	CM	450		
K	Surplus excavated material : remove and deposit in spoil heaps on site	CM	261		
	<b>Carried Forward</b>				

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward				-
	<u>Disposal of water</u>				
A	Keep excavations free from all water by baling, pumping or otherwise	ITEM	1		
	<u>Planking and strutting</u>				
B	Planking and strutting to sides of all excavations : keep excavation free from all fallen materials	ITEM	1		
	<u>Imported Hardcore Filling</u>				
C	Approved quarry stone hardcore filling: 500mm thick (overall) : deposit, spread, level and compact in layers not exceeding 150mm thick : to receive blinding	CM	303		
	<u>Blinding</u>				
D	50mm Sand or stone dust blinding to surface of hardcore	SM	505		
	<u>Insitu Concrete : Class 15/25mm</u>				
E	50 mm Blinding layer : under wall foundations.	SM	223		
F	Ditto : under column bases.	SM	160		
	<u>Insitu concrete : class 25/20 : vibrated : reinforced</u>				
G	Foundations in trenches .	CM	22		
H	Column bases	CM	24		
I	Columns	CM	4		
J	Ground Beam	CM	22		
K	200mm Surface bed : laid in panels	SM	505		
	Carried Forward				-

Item	Description	Unit	Qty	Rate	Amount
	<b>Brought Forward</b>				-
	<u>Reinforcement</u>				
	<u>including bends, hooks, tying wire and distance blocks</u>				
A	8mm diameter bars in Strip Foundation	KG	407		
B	10mm diameter bars in Strip Foundation	KG	803		
C	10mm diameter bars in Column bases	KG	542		
D	12mm diameter bars in Column	KG	195		
E	8mm diameter bars in Column(Strirups)	KG	118		
F	12mm diameter bars in Ground beam	KG	1321		
G	8mm diameter bars in Ground beam ((Strirups)	KG	679		
	<u>Sawn formwork : to</u>				
H	Vertical sides : Strip foundations	SM	187		
I	Ditto : column bases	SM	20		
L	Ditto : Ground beam	SM	224		
K	Formwork to circular reinforced concrete columns; using timber/plywood or steel formwork; including all necessary cutting, shaping, erecting, propping, supporting, applying approved mould oil, striking and removal after curing to leave smooth fair-faced finish.	SM	141		
M	Vertical edge of bed : over 150 but not exceeding 225mm wide	LM	85		
	<u>Walling</u>				
N	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	SM	669		
	<b>Carried Forward</b>				-

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward				-
A	<u>Labours and sundries</u> One layer 500 gauge polythene sheet damp proof membrane : under beds : 300mm laps.  <u>Fabric; B.S. 4483</u>  Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter ( measured net - no allowance made for laps( including bends, tying wire and distance blocks	SM	505		
B		SM	505		
	Carried to Summary				-

Item	Description	Unit	Qty	Rate	Amount
	<u>ELEMENT NO.2</u>				
	<u>REINFORCED CONCRETE SUPERSTRUCTURE</u>				
	<u>In situ concrete: class 25/20 : vibrated : reinforced</u>				
A	Beams	CM	22		
B	Columns	CM	3		
C	Gutter beam	CM	19		
	<u>including bends, hooks, tying wire and distance blocks</u>				
D	8mm diameter bars in Columns (Strirups)	KG	94		
E	12mm diameter bars in Columns	KG	155		
F	8mm diameter bars in Beams (Strirups)	KG	751		
G	12mm diameter bars in Beams	KG	1328		
H	8mm diameter bars in Concrete gutter	KG	751		
I	10mm diameter bars in Concrete gutter	KG	1328		
	<u>Sawn formwork : to</u>				
J	Beams	SM	214		
K	Ditto : Columns	SM	43		
L	Sides and soffits of concrete Gutter	SM	90		
M	Formwork to circular reinforced concrete columns; using timber/plywood or steel formwork; including all necessary cutting, shaping, erecting, propping, supporting, applying approved mould oil, striking and removal after curing to leave smooth fair-faced finish.	SM	25		
	<b>Carried to Summary</b>				

Item	Description	Unit	Qty	Rate	Amount
A	<u>ELEMENT NO.3</u> <u>WALLING</u>  <u>EXTERNAL</u> 200mm thick approved local natural stone;machine cut squared to walling; bedding and jointing in cement sand (1:3) mortar with hoop iron in alternate	SM	471		
C	<u>Damp proof courses ; bituminous felt : bedded in cement mortar (1:4) : 300mm laps</u>  Horizontal : 200mm wide	LM	374		
	Carried to Summary				-

Item	Description	Unit	Qty	Rate	Amount
	<u>ELEMENT NO 4</u> <u>ROOFING</u>				
	<u>Galvanized corrugated Sheet roofing; gauge 28; Pre-painted</u>				
A	Roof covering not exceeding 45 <sup>0</sup> from horizontal; fixing to timber structure (m/s) with roofing nails and neoprene washers.	SM	632		
	<u>Accessories, fixing as necessary to roof sheets</u>				
B	150mm dia. Half round ridge cap	LM	22		
C	Standard ridge end piece	NO	2		
	<u>Wrot cypress : 1st grade ; selected and kept clean</u>				
D	15mm Thick x 100mm wide tongued and grooved eaves boarding	SM	33		
E	25 x 250mm Fascia or barge board	LM	44		
	Carried Forward				

Item	Description	Unit	Qty	Rate	Amount
	<b>Brought Forward</b>				-
	<b><u>Roof Structure (Provisional)</u></b>				
	<b><u>Structural timbers : sawn cypress : pressure impregnated (provisional)</u></b>				
A	50 X 75mm Purlins	LM	732		
	<b><u>Wall Plate</u></b>				
B	50 x 100mm wall plate : fixed with and including 12mm diameter mild steel rag bolt 150mm long at 900mm centres : cast ring beams	LM	20		
C	50 x 200mm Ridge board	LM	22		
	<b><u>The following in 19No trusses : hoisting and fixing at 2.6 metres above ground level (provisional)</u></b>				
D	150 x 50mm Rafters	LM	502		
E	150 x 50mm Bottom tie	LM	53		
F	50 x 100mm Struts and Ties	LM	305		
G	50 x 100mm Joints	LM	399		
G	50 x 50mm Brandering	LM	1441		
H	Drill 50mm thick timber for 10mm diameter bolt (provisional)	NO	38		
	<b><u>Galvanised mild steel (Provisional)</u></b>				
I	10mm Diameter bolts 100mm long : with nut and washers (provisional).	NO	38		
J	1mm Gusset plate size 350 x 75mm: with 3 No holes 10mm diameter to Engineers approval (Provisional).	NO	38		
	<b>Carried to Collection</b>				-

Item	Description	Unit	Qty	Rate	Amount
	<u>Rainwater Disposal (Provisional)</u> <u>Unplasticised PVC rainwater pipes and fittings :</u> <u>solvent welded joints</u>				
A	150mm Diameter half round gutter: fixed with approved brackets	LM	30		
B	Extra for stopped end	NO	2		
C	Extra for 90 degree bend	NO	2		
D	Extra for 100mm diameter rainwater outlet	NO	2		
E	100mm Diameter rain water pipe : fixed to wall with approved holderbats	LM	2		
F	Extra for bend	NO	2		
G	Extra for swan neck : 600mm projection.	NO	2		
H	Extra for rainwater shoe	NO	2		
I	100mm Diameter "Fulbora" roof outlet : with dome grating : joint to pipe	NO	10		
J	General surfaces : eaves boarding	SM	33		
K	Fascia : over 200 but not exceeding 300mm girth	LM	44		
	<b>ROOFING</b>				
	Carried Forward to Summary				

Item	Description	Unit	Qty	Rate	Amount
	<u>ELEMENT NO.5-WINDOWS</u>				
	<u>Supply, assemble and fix the following purpose-made mild steel casement windows in small panes of 300 x 200mm; standard metal section from approved manufacturer complete with frames, transomes, mullions and with and including permanent ventilators comprising "T" bar, gauze and 16 gauge sheet metal hood 50mm high x 50mm projection to full width of window, coupling mullions, approved ironmongery and one coat manufacturer's primer; all welding ground to smooth finish.</u>				
	<i>Steel; for glazing with putty, lugs to two jambs, cutting and pinning to concrete or blockwork, fixing</i>				
A	Window, overall size 2500 x 1800mm high.	NO	18		
B	Window, overall size 750 x 800mm high.	NO	4		
	<u>Glazing</u>				
C	4mm Thick clear sheet glass panes; fixing with premium putty	SM	84		
	<u>Prepare and apply one coat etching primer; one undercoat and two coats gloss oil paint to Crown Solo or other equal and approved to: -</u>				
D	General surfaces of metal casement doors and windows; over 300mm girth.	SM	168		
	Element 05				
	WINDOWS CARRIED TO SUMMARY			KSHS	

Item	Description	Unit	Qty	Rate	Amount
	<u>ELEMENT NO.6</u>				M
	<u>DOORS</u>				
	<u>METAL DOORS</u>				
A	Supply and install a, premium double-acting (double swing) door system 1500mm x 3000mm. The door panel shall be 40mm thick (or appropriate spec) constructed from 304-grade stainless steel with a brushed finish, featuring double-lined construction for durability. The unit shall include high-strength, heavy-duty hinges designed for bidirectional opening (180-degree rotation) and automatic self-closing, allowing for easy access from both sides. Two (2) door panels (total width to match specification).	NO	10		
	<u>Supply and fix the following ironmongery to metal : with matching screws (references are to 'Union' catalogue or other equal approved)</u>				
B	200mm Long heavy duty purpose made steel butt hinges.	PRS	6		
C	Five lever rebated mortice lock with chrome latch and set lever handles. (Ref 2201)	NO	2		
D	300mm Long x 75mm wide x 20mm diameter mild steel 'D' handles.	NO	2		
E	Overhead door closer power 2 - 6 ; standard arm (shenfei) ; Ref 7836.	NO	2		
F	2500mm Long x 16mm diameter mild steel barrel bolt : secured to door by 40 x 40 x 6mm angel bolt	NO	2		
G	Panic Bolt for single door ; 08-U801-Silver as per Union Assa Abloy Brand	NO	2		
	<u>Prepare, touch primer and apply one undercoat and two finishing coats gloss paint : to metal</u>				
H	General surfaces ; panel doors	SM	45		
	<b>Carried Forward</b>				

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward <u>Flush Doors</u>				-
	<u>Flush doors : solid cored : plywood facing with mahogany veneered both sides : hardwood lipping all edges</u>				-
A	45mm Door size 800 x 2060mm	No	14.00		-
	<u>Flush doors : semi-solid core with plywood facing both sides : hardwood lipped on all exposed edges</u>				
B	45mm Thick door size 720 x 1950mm high	No	4.00		
	<u>Sawn cypress: pressure impregnated</u>				
C	75 x 25mm Packing piece : plugged	LM	54.00		
	<u>Wrot camphor : selected and kept clean</u>				
D	25 x 25mm Glazing bead : one labour	LM	50.40		
E	15mm Quadrant beading	LM	107.00		
F	50 x 30mm Architrave : two labours	LM	107.00		
G	100 x 50mm Frame : four labours : screwed and pelltated	LM	107.00		
H	100 x 50mm Transome : eight labours	LM	4.00		
	Carried Forward				-

Item	Description	Unit	Qty	Rate	Amount
	<u>Supply and fix the following ironmongery to timber : with matching screws : references are to 'Union' catalogue or other equal and approved</u>				
A	10mm pressed steel butt hinges	Pairs	27.00		
B	Two lever mortice lock : set lever handles (ref 680-06-02)	No	18.00		
C	150mm Chrome 'D' handles as (union Ref 20931)	No	18.00		
D	WC Indicator bolt : (Ref 2459)	No	18.00		
E	Overhead door closer (Ref union 2003)	No	18.00		
F	200mm Tower bolt	No	18.00		
G	Rubber door stops (union Ref 8400)	No	18.00		
	<u>4mm Clear sheet glass : glazing to wrot with beading (measured separately) and putty</u>				
H	In panes over 0.10 but not exceeding 0.50 square metres	SM	3.00		
	<u>Prepare, prime and apply two undercoats and one finishing coat gloss paint; on woodwork</u>				
J	General surfaces : doors : (both sides measured flat overall)	SM	122.00		
K	Frames : over 100 but not exceeding 200mm girth	LM	107.00		
L	Frames : over 50 but not exceeding 100mm girth	LM	229.00		
	<b>DOORS CARRIED TO SUMMARY</b>				

Item	Description	Unit	Qty	Rate	Amount
	<u>ELEMENT NO.7 -INTERNAL FINISHES</u>				
	<u>FLOOR FINISHES</u>				
	<u>Cement and sand (1:4) trowelled screeds : on concrete : to</u>				
A	20mm Floor screed to receive Terrazo	SM	505		
B	20mm Floor screed to receive Terrazzo skirting	LM	201		
	<u>Terrazo</u>				
	10mm thick wash terrazo pavings of approved colour to floor complete with UPVC diving strips on 30mm thick cement & sand screed [m.s.]	SM	505		
C	Ditto Skirting - 100 mm high	LM	201		
D	30 x 4mm thick dividing strips set in floor	LM	150		
	<u>WALL FINISHES</u>				
	<u>12mm lime plaster in two coats : steel trowelled finish : on concrete or blockwork : to</u>				
E	Walls and columns	SM	147		
G	Precast concrete vent block walling measured flat overall	SM	15		
	<u>Prepare and apply three coats PVA matt vinyl emulsion paint : on</u>				
F	Plastered walls, columns	SM	147		
G	Precast concrete vent block walling measured flat overall	SM	15		
	<b>INTERNAL FINISHES CARRIED TO SUMMARY</b>				

Item	Description	Unit	Qty	Rate	Amount
	<u>ELEMENT NO.8- EXTERNAL FINISHES</u>				
	<u>PAVEMENT</u>				
A	200mm Hardcore bed : deposited, spread, levelled and compacted : to receive sand bed	SM	108		
B	50mm Sand bed : levelled and compacted to receive paving	SM	108		
C	50x 600 x 600mm precast concrete (class 20) paving slabs : laid on sand bed (measured separately) : jointed and pointed in cement mortar (1:4)	SM	108		
	<u>WALL FINISHES</u>				
	<u>12mm lime plaster in two coats : steel trowelled finish : on concrete or blockwork : to</u>				
D	Walls and columns	SM	147		
	<u>Prepare and apply three coats PVA matt vinyl emulsion paint : on</u>				
E	Plastered walls, columns and pre-cast vent block walling measured flat overall.	SM	147		
	<u>Cement and sand (1:4) render : wood float finish to : concrete</u>				
F	Plinth walls and edges of floor bed	SM	54		
G	Sides of beams	SM	27		
	<u>Prepare and apply three coats first grade plastic emulsion paint : to</u>				
H	Plastered beams and soffits	SM	27		
J	Precast concrete vent walling (measured flat overall)	SM	25		
	Carried to Summary				-

Item	Description	Unit	Qty	Rate	Amount
<u>SUMMARY PAGE</u>					
			<u>Page No.</u>		<u>Amount</u>
1	SUBSTRUCTURES		WH/4		-
2	REINFORCED CONCRETE SUPERSTRUCTURE		WH/5		-
3	WALLING		WH/6		
4	ROOFING		WH/9		
5	WINDOWS		WH/10		
6	DOORS		WH/13		
7	INTERNAL FINISHES		WH/14		
8	EXTERNAL FINISHES		WH/15		
<u>BUILDER'S WORK</u>					
Carried to Main Summary					

Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
	<p data-bbox="220 186 769 218"><b>Prefabricated Mortuary Cold-room Cabinet</b></p> <p data-bbox="220 275 786 1115">2-chamber mortuary refrigerated cabinet for 8 bodies on four tiers/ levels and 2 doors.A complete prefabricated front loading mortuary cold cabinet with four tiers. The cabinet to have one door per four vertical tiers. The chamber to be fabricated from epoxy/Teflon painted steel both internally and externally sandwiching a minimum of 100mm thick polystyrene insulation. It shall operate between 2 to 6 degrees centigrade inside the cold chambers. ThePackage to be complete with digital controls panel, digital electronic Thermostat, fan assisted evaporator, air cooled hermetic condenser Unit, internal, insulated door, door locking System, stainless steel in-built racks, stainless steel stretchers,Stainless steel body trays in each tier and to use R404A or any other non-ozone depleting refrigerant. The cabinet to have Complete refrigeration components such as thermostats,Thermometer, sight glass with color coding, thermostatic expansion valve, solenoid valve, filter drier, low and high pressure cut-off switch. The evaporator shall be fixed in the cabinet ceiling.</p>	3	NO		
	Carried Forward				



Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
	<b>Total C/F from the previous next page</b>				
	<b>Pipe work of hard copper tubing;</b>				
A	- 3/8mm	3	ROLL		
B	- 5/8mm	3	ROLL		
C	5/8mm thick insulation which shall be approved before installation by the project engineer.	54	M		
	<b>Wall Mounted Wired Remote Controller</b>				
D	-Fully wired wall mounted remote controller panel complete with digital display,	3	NO		
E	Wiring and conduit work including but not limited to interconnecting cable between the outdoor and indoor units.	1	ITEM		
F	Surge Protector -Power surge protector as Solatek or equal and approved suitable for the cold cabinets for both the evaporators and condensers.	3	NO		
	<b>Embalmed Body Racks to accommodate 96 bodies</b>				
G	Made of Stainless steel to accomodate 4 body in 4 levels.manufactured in 304L stainless steel, tray to be of width 650mm x 2000mm long, equipped with 4No. 12.5mm dia swivelling wheels including two with brake, embalming drain hole, stainless steel conveyer guide rails, conveyer rollers, etc	No	24		
	<b>Testing, Commissioning and Training</b>				
H	Allow for setting to work, testing and commissioning of theRefrigeration installation to the satisfaction of the Project Engineer and allow for training of the maintenance team of the client on all the operation and maintenance of the refrigeration installations	1	ITEM		
	<b>Total C/F to the next page</b>				

Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
	Total C/F from the previous next page				
	Prefabricated Mortuary Cold-room Cabinet				
	AIR CONDITIONING AND MECHANICAL VENTILATION				
	Supply, deliver and install the following as described. Ductwork to be made from galvanised mild steel ductwork complete with bends, transformation pieces, offsets, joints, branches, gaskets, supports, sleeves, stiffeners, splitters, turning vanes, test holes, access doors and any other accessories necessary for the complete laying of the ductwork in compliance to the contract drawings.				
A	<u>Split Air Conditioner</u> Supply and Install 5.3kW (18,000BTU/H) console (convertible type) split air conditioner inclusive of wall mounted outdoor unit complete with purpose made protective steel angle iron frame support brackets and anti-vibration mountings. The indoor unit shall have automatic air deflection dampers, a remote control, wall mounting kit and condensate pipe. It shall operate on R407A refrigerant or any other non-ozone depleting refrigerant. The entire system shall be able to start automatically after power failure with a 3 minute delay. The unit shall be as Carrier Model or approved equivalent. The machines to be installed in the night body room.	No.	1		
B	<u>Ceiling Fan</u> Supply and install	No	8		
	<u>Mechanical Ventilations</u>				
C	<u>Air Supply Fans - Corridors</u>				
	CARRIED FORWARD				

Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
A	<p>Brought Forward</p> <p>Air supply fan capable of volume flow rate to <math>0.36\text{m}^3/\text{sec}</math> against a pressure drop of 200Pa at near maximum efficiency. Fan to be as Aerofoil axial flow fan, complete with supports, flexible connections and anti-vibration mountings. Maximum sound level of 35dB.</p>	No.	2		
B	<p><u>Fresh Air Pre-filter</u></p> <p>Washable and re-usable pre-filter in metal panel of minimum size 400x350x100mm thick and capable of <math>0.36\text{m}^3/\text{sec}</math> of air with a pressure drop of 32Pa and efficiency of 85% ASHRAE as "FRANCE AIR FR SPG 85" or equal and approved.</p>	No.	2		
E	<p><u>Air Supply Diffusers</u></p> <p>1-way laminar flow high wall air diffusers of size 350x350mm, set to discharge <math>0.172\text{m}^3/\text{sec}</math> of air at a velocity of 2.0m/sec.</p>	No.	10		
C	<p><u>Extract Air Grilles</u></p> <p>2-way extract air grille of size 300x300mm, each capable of extracting <math>0.292\text{m}^3/\text{sec}</math>. As "Kool air return grilles" or equal and approved.</p>	No.	24		
D	<p><u>Ductwork</u></p> <p>Galvanized mild steel ductwork 0.8mm thick (s.w.g 22) complete with bends, hangers, supports, sleeves, flexible connectors, branch duct take-offs, flanges, access doors, test reducers, splitters, turning vanes and accessories. All painted both externally and internally with suitable walt black paint.</p>	SM	200		
	<b>CARRIED FORWARD</b>				

Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
	Total C/F from the previous next page				
	<b><u>Balancing Air-flow Dampers</u></b>				
A	Control air-flow dampers size 400x350mm with a galvanized steel frame of 80mm deep and blades of 50mm pitch, complete with operating gear wheels and servomotors. As "FRANCE AIR" and Servomotor type LM 230 or equal and	No.	9		
	<b><u>Air Extract Fan - Embalmed bodies</u></b>				
B	Extract fan each capable of volume flow rate 0.6 m <sup>3</sup> /sec against a pressure drop of 50Pa at near maximum efficiency. Fan to be as Aerofoil axial flow fan, complete with supports, flexible connections and anti-vibration mountings. Maximum sound level of 35dB.	No.	1		
C	Ditto but of flow rate 0.2m <sup>3</sup> /s - Changing rooms	No.	1		
D	Ditto but of flow rate 0.3m <sup>3</sup> /s - Postmortem Room and Embalming room	No.	1		
E	Ditto but of flow rate 0.25m <sup>3</sup> /s - Refrigeration Room	No.	1		
F	Ditto but of flow rate 0.4m <sup>3</sup> /s - Dressing Room	No.	1		
G	<b><u>Flexible connection</u></b>				
	The flexible connection shall be rubber bellows or neoprene and not canvas, to isolate vibrations from the air conditioning unit/fan from the interconnecting ductwork.	No.	8		
	<b>CARRIED FORWARD</b>				

Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
	<b>CARRIED FORWARD</b>				
	<b><u>Silencer.</u></b> Silencer for axial fan systems, constructed from cold formed pre-galvanized steel sheet and absorbent material of acoustic grade resin bonded mineral fibre with erosion resistant facing and moisture resistant lining. Fitted to achieve 15dB noise reduction. Silencer as “WOODS” model HM10 of “C” type, diameter 381mm, or equal and approved.	No.	8		
J	<b><u>Ductwork</u></b> Galvanized mild steel ductwork 0.8mm thick (s.w.g 22) complete with bends, hangers, supports, sleeves, flexible connectors, branch duct take-offs, flanges, access doors, test reducers, splitters, turning vanes and accessories. All painted both externally and internally with suitable matt black paint.	SM	8		
K	<b><u>Flexible connection</u></b> The flexible connection shall be rubber bellows or neoprene and not canvas, to isolate vibrations from the air conditioning unit/fan from the interconnecting ductwork.	No.	1		
H	<b><u>External Weather Louvres</u></b> External weather louvers, size 450 x 450 mm high shall be mounted at the air inlet and outlet external surfaces. This shall consist of a perimeter angle frame enclosing louver blades set at 45° and overlapped on 40mm pitch centre. A bird mesh screen shall be mounted on the rear of the louver, made from extruded aluminium sections of 19 s.w.g. As “TROX” or equal and approved.	No.	9		
	<b>Total C/F to the next page</b>				

Item	Description	qty	unit	Rate(Kshs)	Cost(Kshs)
A	<p><b>Total C/F from the previous next page</b></p> <p><b><u>External Weather Louvres</u></b></p> <p>External weather louvers, size 310 x 303 mm high shall be mounted at the air inlet and outlet external surfaces. This shall consist of a perimeter angle frame enclosing louver blades set at 45° and overlapped on 40mm pitch centre. A bird mesh screen shall be mounted on the rear of the louver, made from extruded aluminium sections of 19 s.w.g. As “Vent-Axia” or equal and approved.</p>	No.	3		
B	<p><b><u>Silencer.</u></b></p> <p>Silencer for centrifugal fan systems, constructed from cold formed pre-galvanized steel sheet and absorbent material of acoustic grade resin bonded mineral fibre with erosion resistant facing and moisture resistant lining. Fitted to achieve 15dB noise reduction. Silencer as “WOODS” model HM10 of “C” type, diameter 381mm, or equal and approved.</p>	No.	1		
C	<p><b><u>Ceiling mounted sweep Fan.</u></b></p> <p>Ceiling mounted sweep fan composed of three blades and blade diameter of 1050mm complete with three speeds wall mounted fan controller . Fan as “X-Pelair” air sweep fans or equal and approved.</p> <p>“X-Pelair” air extract fans or equal and approved.</p>	No.	4		
D	<p><b><u>Electrical works</u></b></p> <p>Allow for electrical works associated with the entire installation of the air conditioning system</p>	Item	1		
E	<p><b><u>Testing and Commissioning</u></b></p> <p>Allow for testing and commissioning of the air conditioning and mechanical ventilation system to the satisfaction of the engineer.</p>	Sum	1		
<b>TOTAL FOR MECHANICAL WORK CARRIED TO MAIN SUMMARY</b>					

**SCHEDULE NO. 1 - ELECTRICAL INSTALLATION WORKS**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<b>Supply, install, test and commission the following ;-</b>				
	<b><u>LIGHTING POINTS</u></b>				
1.01	Lighting points wired in 1.5 mm <sup>2</sup> SC CU cables drawn in concealed 20mm diameter HG P.V.C conduits for:-				
	a) one way switching	34	No.		
	b) two way switching	40	No.		
	c) unswitched	10	No.		
	<b><u>SWITCHES</u></b>				
1.02	10Amps, switch plate as CLIPSAL, BG NEXUS or approved equivalent as				
	a) one gang one way	20	No.		
	b) one gang two way	20	No.		
	c) two gang one way	5	No.		
	d) two gang two way	5	No.		
	d) intermediate switch	3	No.		
1.03	10Amps, <b>splashproof</b> switches as CLIPSAL, BG, NEXUS or approved equivalent				
	a) one gang one way	3	No.		
	b) one gang two way	4	No.		
	c) one gang two way	1	No.		
	<b><u>LIGHTING FITTINGS</u></b>				
1.04	Lighting fittings complete with bulbs or tubes as follows:-				
	<b>a)</b> 600mm x 600mm 34W Slim LED panel with polycarbonate diffuser and fixed driver, 25,000hrs lifetime as PHILIPS SMARTBRIGHT RC091V or approved Equivalent. <b>(Type E)</b>	8	No.		
	<b>c)</b> 16.4W circular recessed LED panel luminaire , PSU-Non- Dimmable polycarbonate with white diffuser and DALI driver, 50,000hrs as PHILIPS GREENSPACE DOWNLIGHTG4, DN293B or approved equivalent. <b>(Type R)</b>	20	No.		
	<b>d)</b> 1200mm, 40 Watts LED waterproof Luminaire with polycarbonate housing and Philips Lumileds, IP65, 25000hrs as PHILIPS WATERPROOF WT066C or approved equivalent <b>(Type F)</b>	15	No.		
	<b>SUB TOTAL C/F TO NEXT PAGE NO. H/7</b>				

**SCHEDULE NO. 1 CONT'D - ELECTRICAL INSTALLATION WORKS**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<b>Supply, install, test and commission the following ;-</b>				
	<b>Sub Total B/F From Previous PAGE NO. H/6</b>				
	<b>e)</b> 1200mm X300mm, 40 Watts LED waterproof Luminaire with polycarbonate housing and Philips Lumileds, 50000hrs as PHILIPS RC160V or approved equivalent <b>(Type L)</b>	10	No.		
	<b>f)</b> Ultr-Slim white aluminium bodied maintained/non maintained LED EXIT sign with engraved fire retardant acrylic sign blade for suspended use as THORN Voyager LED EXIT Sign or approved Equivalent	10	No.		
	<b>g)</b> Standard, IP65 rated fluorescent fitting with cold resistant enclosure c/w 2X36W lamps with Switchstart gear . Employs stainless steel toggles. As Thorn Coldroof.	6	No.		
	<b>h)</b> 70 W outdoor high power LED flood light as Philips Essential Smartlight LED Floodlight <b>(Type B)</b>	15	No.		
	<b>i)</b> 2D circular recessed water proof LED luminaire polycarbonate with white diffuser as Philips smartbright LED or approved equivalent. <b>(Type 2D)</b>	15	No.		
	<b>Socket Outlet and other Power Points</b>				
1.05	13 Amps. Socket outlet points wired ring comprising of 3x2.5 mm sq. single core PVCI copper cables drawn in concealed 25mm HG PVC conduits including all accessories.	50	No.		
1.06	13 Amps. Moulded plate switched socket outlet with neon indicator as BG, CLIPSAL or approved equivalent				
	a) single.	8	No.		
	b) twin.	32	No.		
1.07	13 Amps. <b>splashproof</b> switched socket outlet with neon indicator as BG, CLIPSAL or approved equivalent				
	a) twin.	10	No.		
	<b>SUB TOTAL C/F TO NEXT PAGE NO. H/8</b>				

*Electrical Installation Works*


**SCHEDULE NO. 1 CONT'D - ELECTRICAL INSTALLTION WORKS**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<b>Supply, install, test and commission the following ;-</b>				
	<b>Sub Total B/F From Previous PAGE NO.H/7</b>				
1.08	Cooker point comprising of 3x6mm <sup>2</sup> PVCI Copper cables drawn in concealed 25mm dia. HG PVC conduits from DB	1	No		
1.09	Cooker control unit complete with 13 Amps. Switched socket outlet as THORN or approved equivalent.	1	No		
1.10	Cooker connection unit for above item.	1	No.		
1.11	Cabinet power point comprising wiring in 3x6.0mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	12	No.		
1.12	Extract Fan power point comprising wiring in 3x4.0mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	5	No.		
1.13	Hand drier point comprising wiring in 3x2.5mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	5	No.		
1.14	Instant Shower point comprising wiring in 3x4.0mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	2	No.		
1.15	Under Sink water heater point comprising wiring in 3x4.0mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	3	No.		
1.16	Post mortem table power point comprising wiring in 3x4.0mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	2	No.		
1.17	Double Pole switches with neon indicator as CLIPSAL or approved equivalent for items 1.11 thr' 1.16 above.	29	No.		
<b>SUB TOTAL C/F TO NEXT PAGE NO. H/9</b>					

**SCHEDULE NO. 1 CONT'D - ELECTRICAL INSTALLATION WORKS**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<b>Supply, install, test and commission the following ;-</b>				
	<b>Sub Total B/F From Previous PAGE NO.H/8</b>				
	<b><u>TELEPHONE/DATA AND TV WORKS</u></b>				
1.18	16 SWG, (300 x 300 x 100) mm <sup>3</sup> galvanised steel draw box for telephone, data works and TV works.	5	No.		
1.19	Telephone/Data outlet point comprising of concealed 20 mm dia. HG PVC conduits plus draw wire.	10	No.		
1.20	RJ45, Data/Telephone Moulded plate as BG, CLIPSAL or approved equivalent. a) twin.	10	No.		
1.21	TV points comprising Draw wire in concealed PVC conduits	5	No.		
1.22	TV outlet plate complete with wiring in CO-AXIAL cable drawn in concealed HG PVC conduit	5	No.		
	<b><u>DISTRIBUTION BOARDS</u></b>				
1.23	12ways TP&N, flush mounted distribution board complete with 200A integral isolator as HAGER or approved equivalent complete with all accessories but excluding MCBs.	2	No.		
1.24	6ways SP&N, flush mounted Consumer Unit complete with 100A integral isolator as HAGER or approved equivalent complete with all accessories but excluding MCBs.	1	No.		
1.25	MCB's for item 1.23 & 1.24 above				
	(a) 10A, SP	8	No.		
	(b) 20A, SP	10	No.		
	(c) 32A SP	20	No.		
	(d) 45A SP	1	No.		
	(e) 45ATP	12	No.		
	(f) 63ATP	2	No.		
	(g) Blanking plates SP	2	No.		
	(h) Blanking plates TP	5	No.		
	<b>SUB TOTAL C/F TO NEXT PAGE NO. H/10</b>				

**SCHEDULE NO. 1 CONT'D - ELECTRICAL INSTALLATION WORKS**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ks)
	<b>Supply, install, test and commission the following ;-</b>				
	<b>Sub Total B/F From Previous PAGE NO.H/9</b>				
	<b>SUB-MAIN POWER DISTRIBUTION</b>				
1.26	35 mm <sup>2</sup> 4Core PVC/SWA/PVC Copper cables drawn in cable trench and rising duct from MV Switchboard to CLB	150	LM		
1.27	Weatherproof metallic cable loop-in box complete with all accessories to project Engineer's approval.	3	No.		
1.28	The following for item 1.27 above complete with all fixing marterials and any other necessary accessories:-				
	a) MCB's as ABB or approved equivalent	9	No.		
	b) Neutral connectors	3	No.		
	<b><u>EARTHING.</u></b>				
1.29	Earthing of the CLB Sub-board above, comprising of the following:-				
	a) 15 mm x 1800 mm earth rod as FURSE cat. No. RB 105.	3	No.		
	b) 15 mm dia. Driving stud as FURSE cat.No. ST100.	3	No.		
	c) Rod to tape clamp as FURSE.	3	No.		
	d) Concrete inspection pit as FURSE cat. No.PT005. (or a well made 320mm x 320mmx 210 mm depth pit.)	3	No.		
	e) 25x3mm copper tape	10	LM		
1.30	2m galvanised steel mountingcolumn for mounting the photocell kit complete with fixing accessories	2	No		
1.31	Photocell kit complete with photocell, socket and bracket to be installed on a steel column.	2	No		
1.32	wiring photo cell with 2.5mm <sup>2</sup> twin with earth pvc insulated copper cable	2	No.		
1.33	6 mm <sup>2</sup> 2Core PVC/SWA/PVC Copper cables from iin concealed 32mm dia HG PVC conduits from DB to photo cell mounting for security lighting and supply to pit latrine	50	LM		
1.34	Cable glands for 6 mm <sup>2</sup> 2 core PVC/SWA/PVC cab;e	10	No.		
1.35	Wiring security lights with 2.5mm <sup>2</sup> twin with earth pvc insulated copper cable in concealed HG PVC conduits	12	No.		
1.36	5A DP MCB with enclosure	2	No		
	<b>SUB TOTAL C/F TO MAIN SUMMARY PAGE NO. H/15</b>				

**SCHEDULE NO. 2- FIRE ALARM SYSTEM.**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<b>Supply, install, test and commission the following ;-</b>				
	<b><u>FIRE ALARM SYSTEM.</u></b>				
2.01	Fire alarm points wired in 3x2.5mm <sup>2</sup> <b>Heat resistant</b> SC PVC copper cables drawn in concealed HG PVC conduits	34	No.		
2.02	Conventional weatherproof LED sounder beacon as MENVIER MSB124DB	4	No.		
2.03	Smoke detectors as MENVIER or approved equivalent.	30	No.		
2.04	Fire break glass Manual call point unit as MENVIER or approved equivalent complete with a packet of 5 spare glasses, a packet of 5 spare test keys, a spare back box and a hinged cover.	8	No.		
2.05	Flush mounted 4 Zone, Addressable Fire alarm control panel complete with Battery and charger as MENVIER or approved equivalent	1	No.		
2.06	power point wired <b>radial</b> comprising of 3x2.5 mm sq. <b>Heat resistant</b> single core PVC copper cables drawn in concealed 20mm HG PVC conduits for item 1.1.38 above.	1	No.		
	<b><u>FIREMAN'S SWITCH</u></b>				
2.07	Fireman's switch circuit comprising of 3x2.5 mm <sup>2</sup> Heat resistant single core PVC copper cables drawn in concealed 20mm HG PVC conduits complete with all fixing materials necessary to the Incomer.	1	No.		
2.08	Firemans switch as MENVIER or approved equivalent.	1	No.		
2.09	Water Booster power point comprising wiring in 3x6.0mm <sup>2</sup> PVC-SC-CU cables in concealed PVC conduits	2	No.		
2.10	32A SPN isolator for above item as CLIPSAL or approved quivalent.	2	No.		
2.11	Allow for training of Hospital staff on the all operations of the fire alarm system	1	Item		
<b>SUB TOTAL C/F TO MAIN SUMMARY PAGE NO. H/15</b>					

**SCHEDULE NO.3 - LIGHTNING PROTECTION SYSTEM.**

Item	Description	Qty	Unit	Rate (Ksh)	Amount (Ksh)
	<b>Supply, install, test and commission the following ;-</b>				
	<b><u>LIGHTNING PROTECTION</u></b>				
	<b><u>AIR TERMINATION</u></b>				
3.01	25x3mm copper tape including copper saddles at 1500mm intervals and bonding to water tanks and other metal work in the roof , all as FURSE	100	LM		
3.02	State Holdfast as Furse Cat. No. HF015 to fix the above tape to the roof	60	No.		
3.03	Copper air terminations (lightning arrestors) inclusive of base clamp and all fixing materials as FURSE	3	No.		
	<b><u>DOWNWARD CONDUCTOR</u></b>				
3.04	Downward conductor comprising 25mm x 3 mm thick bare copper tape as FURSE	24	LM		
3.05	Copper square tape clamp for making crossing tape joints	8	No.		
3.06	HG PVC conduits 32mm diam. for securing the down conductors complete with sandles	24	LM		
3.07	Test clamp as FURSE	6	No.		
	<b><u>EARTHING.</u></b>				
3.08	Earthing comprising of the following and any other necessary accessories:-				
	a) 15 mm x 1800 mm earth rod as FURSE cat. No. RB 105.	6	No.		
	b) 15 mm dia. Driving stud as FURSE cat.No. ST100.	6	No.		
	c) Rod to tape clamp as FURSE.	6	No.		
	d) Concrete inspection pit as FURSE cat. No.PT005. (or a well made 320mm x 320mmx 210 mm depth pit.)	6	No.		
	e) 25x3mm copper tape	30	LM		
<b>TOTAL C/F TO MAIN SUMMARY PAGE No. H/15</b>					

**SCHEDULE NO.4 - PARKING AREA LIGHTING**

Item No.	Description	Qty	Unit	Rate	Amount in Kshs.
	<b>Supply, install, test and commission the following :-</b>				
4.01	7.6 Meters outdoor/street lighting galvanized steel round column for side entry single arm painted with rust proof aluminum paint in concrete foundation and with a lockable anti-vandalism door.	6	No.		
4.02	90 WATTS IP65 High Power Street/Security LED Floodlighting luminaire as Nikkon LEDXION S433 or approved equivalent	6	No.		
4.03	Trenching for street lighting cables comprising of the following and any other necessary accessories				
	a) Trenching to a minimum depth of 600mm	200	LM		
	b) cable laying and tiling in the trenches	200	No.		
	c) Back filling of the trenches	200	LM		
	d) cable makers comprising of concrete pillar to engineers approval	5	No.		
4.04	5m galvanised steel column for mounting the photocell kit	1	No		
4.05	Photocell kit complete with photocell, socket and bracket to be installed on a steel column.	2	No		
4.06	wiring photo cell with 2.5mm <sup>2</sup> twin with earth pvc insulated copper cable	10	No.		
4.08	50mm diameter super high impact heavy guage PVC duct with 100mm concrete surround	30	LM		
4.09	Earthing after every two street lighting columns comprising of the following and any other necessary accessories:-				
	a) 15 mm x 1200 mm earth rod as FURSE cat. No. RB 105.	3	No.		
	b) 15 mm dia. Driving stud as FURSE cat.No. ST100.	3	No.		
	c) Rod to tape clamp as FURSE.	3	No.		
	d) Concrete inspection pit as FURSE cat. No.PT005. (or a well made 320mm x 320mmx 210 mm depth pit.)	3	No.		
	e) 6.0 mm <sup>2</sup> SC CU Earth Lead	80	LM		

**SCHEDULE NO. 4 CONT'D - PARKING AREA LIGHTING**

Item No.	Description	Qty	Unit	Rate	Amount in Kshs.
	<b>Supply, install, test and commission the following ;-</b>				
	<b>SUBTOTAL B/F FROM PREVIOUS PAGE H/6</b>				
4.10	10 mm <sup>2</sup> 3Core PVC/SWA/PVC armoured Copper cables from distribution board to contril pillar	50	LM		
4.11	63A DP MCB with enclosure	2	No.		
4.12	6 mm <sup>2</sup> 2Core PVC/SWA/PVC armoured Copper cables from control pillar to street lights	200	LM		
4.13	Cable glands for 6 mm <sup>2</sup> 2 core PVC/SWA/PVC cab;e	100	No.		
4.14	Wiring inside lamp posts with 1.5mm <sup>2</sup> twin with earth pvc insulated copper cable.	6	No.		
4.15	5A DP MCB with enclosure	6	No		
4.16	Powder Coated Control pillar fabricated from 14SWG mildsteel plain sheet complete with the following items:-				
	a) 40A SPN contactor as Telemecanique	1	No.		
	b) 40A, 500mA sensitive SP RCBO	1	No.		
	c) 4way consumer unit complete with 100A integral Isolator	1	No.		
	d) 20A MCB in the consumer unit	2	No.		
	e) blanking plates	2	No.		
4.17	Complete Eathing to Kenya Power standards at the 5 No. control pillars comprising of the following and all necessary accessories				
	a) 15 mm x 1800 mm earth rod as FURSE cat. No. RB 105.	1	No.		
	b) 15 mm dia. Driving stud as FURSE cat.No. ST100.	1	No.		
	c) Rod to tape clamp as FURSE.	1	No.		
	d) Concrete inspection pit as FURSE cat. No.PT005. (or a well made 320mm x 320mmx 210 mm depth pit.)	1	No.		
	e) 6.0 mm <sup>2</sup> SC CU Earth Lead	30	LM		
	<b>TOTAL CARRIED TO MAIN SUMMARY</b>				



# **LANDSCAPING**

Item	Description	Unit	Qty	Rate	Amount
	<u>EXTERNAL WORKS</u>				
	<u>SITE-PREPARATION AND EARTHWORKS (ALL PROVISIONAL)</u>				
	<u>SITE CLEARANCE</u>				
A	Clear site of bushes, scrub, undergrowth and cut down small trees not exceeding 600mm girth and grub up roots : burn on site or load and remove from site as directed.	SM	1,000		
B	Cut down trees not exceeding 600mm girth and grub up roots : load and remove from site to as directed.	NO	5		
C	Ditto over 600mm but not exceeding 900mm girth : ditto	NO	5		
D	Ditto : over 900mm but not exceeding 1200mm girth : ditto	NO	5		
E	Ditto : over 1200mm ditto but not exceeding 1500mm girth : ditto	NO	5		
F	Ditto : over 1500mm ditto but not exceeding 1800mm girth : ditto	NO	5		
	<u>EXCAVATIONS AND EARTHWORKS</u>				
G	Excavate (average) 300mm deep to remove top soil : deposit heaps where directed on site for landscaping.	SM	1,000		
	<u>Excavation : cut and fill profiles (to formation level)</u>				
H	Excavate to reduce levels ; not exceeding 1.5 metres deep commencing from stripped levels.	CM	1,500		
I	Extra over excavation for excavating in hard murrum or rock all classes.	CM	350		
	Carried Forward				

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward				-
A	Remove excavated materials : load wheel and deposit in away from site ; approve dumping site. Contractor to confirm likely location before pricing	CM	925		
B	Excavate in spoil heaps selected excavated material : filling to make up levels : spread, level and compact in layers not exceeding 200mm thick : in roads, parking and hardstanding areas, buildings etc.	CM	925		
	Carried Forward				-

Item	Description	Unit	Qty	Rate	Amount
	<b>Brought Forward</b>				-
A	1500mm Fill materials, Using approved material material sub base course layers of 200mm to 98% MDD (standard compaction)	CM	925		
	<b><u>SITE PREPARATION AND EARTHWORKS</u></b>				
	<b><u>Disposal of water</u></b>				
B	Keep excavations free from all weather including underground springs, running surface water etc by baling, pumping or otherwise.	ITEM	1		
	<b><u>Planking and strutting</u></b>				
C	Planking and strutting to sides of all excavations : keep excavations free from all fallen materials.	ITEM	1		
	<b><u>LANDSCAPING</u></b>				
	<b><u>PLANTING</u></b>				
D	Clear ground of debris, boulders, rubbish and stones ; excavate from top soil spoil heaps : wheel, spread and level (average) 200mm deep : ready for grass planting.	SM	1,000		
E	Selected red top soil : excavate from spoil heaps, transport, spread and grade 100mm deep : including providing and mixing with manure to the approval of Architect.	SM	1,000		
F	Provide and plant approved local grass at 150mm centres bothways : well water, trim and maintain till well established to the approval of the Architect.	SM	1,000		
	<b>Carried Forward</b>				-

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward				-
	<u>SECTION No. 2</u>				
	<u>CONCRETE APRONS - ROADS AND RAMPS</u>				
	<u>EXTERNAL WORKS AND SERVICES</u>				
	<u>CONCRETE APRONS</u>				
	<u>ALL PROVISIONAL</u>				
	Note:All excavation measured within the earthworks				
	<u>Soil poisoning</u>				
A	Chemical herbicide treatment to sub-soil or fillings 'Telvar' or other equal and approved : provide ten year guarantee (To be provided on completion)	SM	1,000		
	<u>Surface treatment</u>				
B	Grade and compact sub-grade or filling to falls, crossfalls and slopes : compact to : 108% MDD (Heavy Duty Compaction)	SM	1,000		
	<u>Murram filling</u>				
C	100mm Thick sub-base course layer : graded to falls, crossfalls and chambers : compacted to 108% MDD (standard Compaction)	SM	1,000		
	<u>Stone dust blinding</u>				
D	50mm stone dust blinding to surface of hardcore	SM	1,000		
	<u>Graded crushed stone filling</u>				
E	450mm Approved quarry stone(hardcore) filling base course : hand packed and graded to falls, crossfalls and cambers : compact in layer not exceeding 225 mm thick : compact by rolling to 100% MDD (standard Compaction) to receive concrete paving (ms)	CM	450		
	<u>Carried Forward</u>				-

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward				-
	<u>KERBS</u>				
	<u>Precast concrete units : class 25/20 vibrated : reinforced</u>				
A	125mm x 250mm Half-battened Kerbs 225mm x 100mm concrete (Class 15) bed: 100mm x 1100mm concrete (Class 15) haunching one side formwork	LM	600		
B	Ditto : curved to mean radius of 3000mm	LM	25		
C	Ditto : curved to mean radius of 5000mm	LM	25		
D	Ditto : curved to mean radius of 10000mm	LM	25		
	<u>ROAD CHANNEL</u>				
	Precast concrete class 25/15 overall size 125mm wide x 100mm high road channel laid on and including 300 x 100mm plain concrete class 20/20 haunched foundation on one side including all necessary excavations and formwork				
E	100mm plain concrete class 20/20 haunched foundation on one side including all necessary excavations and formwork	LM	600		
F	Ditto : curved to mean radius of 3000mm	LM	25		
G	Ditto : curved to mean radius of 5000mm	LM	25		
H	Ditto : curved to mean radius of 10000mm	LM	25		
	Carried Forward				-

Item	Description	Unit	Qty	Rate	Amount
	Brought Forward				
	<u>PATHS AND PAVINGS ALONG THE ROADS AND PARKING :</u>				
	<u>All excavation, sub-base material and rolling and compaction related to the paths and pavements is included under Earthworks</u>				
	<u>Graded crushed stone filling</u>				
A	300mm Approved quarry stone(hardcore) filling base course : hand packed and graded to falls, crossfalls and cambers : compact in layer not exceeding 225 mm thick : compact by rolling to 100% MDD (standard Compaction) to receive concrete paving (ms)	CM	180		
	<u>Surface treatment</u>				
B	Grade, level and compact base course : to falls : to receive sand bed	SM	600		
	<u>Sand filling</u>				
C	50 mm sand bed : levelled and compacted to falls : to receive paving	SM	600		
	<u>Murram filling</u>				
D	100mm Bed : levelled and compacted to 100% BS compaction : to falls: to receive sand bed	SM	600		
	<u>Precast concrete units : Class 20/20mm : finished fair on all exposed faces : laid on sand bed (measured separately) : jointed in cement mortar (1:3)</u>				
E	50mm paving slabs size 600 x600mm : butt jointed	SM	600		
	<u>Paving Blocks</u>				
	<u>80mm Medium duty paving blocks : from Bamburi Concrete Products or equal and approved : : on sand bed (measured separately) : on</u>				
F	Paths and Roads parking areas	SM	600		
	Carried to Main Summary				



# **SEPTIC TANK**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>SEPTIC TANK (15000 LITRES CAPACITY)</b>				
A	Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away	SM	28		
B	Pit excavation commencing at reduced levels depth not exceeding 1.50m deep	CM	42		
C	Pit excavation over 1.50m deep but not exceeding 3.00m deep	CM	42		
D	Extra-over for excavation in soft rock	CM	12		
E	Extra-over for excavation in hard rock	CM	12		
F	Remove surplus excavated material from site	CM	23		
G	Backfill around foundation	CM	89		
	<b>Filing</b>				
H	300 mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers to receive concrete surface bed	CM	26		
	Insitu concrete: class 15: mix 1:3:6				
I	50mm blinding layer	SM	8		
	<b>Concrete work</b>				
	Reinforced Concrete class 30/20 (1:1:2)				
J	200mm thick base slab with surface steel trowelled smooth	SM	84		
K	150 mm thick cover slab	CM	84		
	<b>CARRIED FORWARD</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>BROUGHT FORWARD</b>				-
A	100mm thick precast concrete scum board	SM	1		
B	B 100mm thick precast concrete dividing wall Reinforcement	SM	21		
	<u>High yield square twisted bar reinforcement to BS 4461 (Provisional).</u>				
C	8mm Diameter bars	KG	156		
D	10mm Ditto	KG	266		
E	Mesh fabric reinforcement ref. No. A142 laid in floor slab with minimum 150 mm side allowance	SM	84		
	<u>Walling</u>				
F	200 Thick load bearing solid concrete block walling	SM	144		
	Sawn formwork Formwork to sides of base slab girth over 150mm but not exceeding 225mm	LM	8		
G	Formwork to sides of cover slab girth over 150mm but not exceeding 225mm	LM	38		
H	Formwork to soffit's of cover slab	SM	84		
	<b>Finishes</b>				
I	Cement and sand mortar (1:3) in:				
J	15 mm Thick render mixed with Sika or equivalent water proofing admixture to internal walls and floors	SM	114		
K	20 mm Thick render to top slab	SM	168		
L	600x450x6mm heavy gauge steel primed metal manhole cover on slab with and including metal framing all around	NO	5		
M	600x600x6mm heavy gauge steel primed metal manhole cover on slab with and including metal framing all around	NO	5		
N	20mm Diameter bars, 'U' shaped to form steps with ends embedded into masonry wall, average length 450mm	NO	3		
	<b>Benching</b>				
O	Cement sand mortar benching with waterproof additive	SM	24		
	<b>CARRIED FORWARD</b>				-

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>BROUGHT FORWARD</b>				-
	<b>INLET AND DISTRIBUTION MANHOLES</b>				
	<b>Excavation(Provisional)</b>				
A	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing, pumping or otherwise	ITEM	1		
B	Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil	SM	5		
C	Pit excavation commencing at reduced levels depth not exceeding 1.50m deep	CM	1		
D	Extra-over for excavation in hard rock	CM	1		
E	Remove surplus excavated material from site	CM	1		
F	Backfill around foundation	CM	1		
	<b>Insitu concrete: class 15: mix 1:3:6</b>				
G	50mm blinding layer	SM	5		
	<b>Concrete work</b>				
	<u>Reinforced Concrete class 25</u>				
H	smooth	SM	1		
	<b>Reinforcement</b>				
I	Mesh fabric reinforcement ref. No. A142 laid in floor slab with minimum 150 mm side allowance	SM	1		
	<b>Walling</b>				
J	I200 Thick load bearing solid concrete block walling	SM	5		
	<b>Finishes</b>				
	UPVC Pipes				
K	100mm diameter inlet to septic tank (Dependent on site topography )	LM	10		
L	100mm diameter inlet to soak pit (Dependent on site topography )	LM	15		
	<b>CARRIED FORWARD</b>				-

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<b>BROUGHT FORWARD</b>				-
	SOAKAGE PIT Excavation(Provisional)				
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials by bailing, pumping or otherwise				
A	Prepare site by stripping top 200 mm of soil to remove all debris including sand (if any) from site and carting away spoil	SM	1		
B	Pit excavation commencing at reduced levels depth not exceeding 1.50m deep	CM	1		
C	Extra-over for excavation in hard rock	CM	1		
D	Remove surplus excavated material from site	CM	1		
	<b>Filing</b>				
E	300 mm thick approved hardcore filling spread, well rammed and compacted in 150mm layers to receive concrete surface bed (measured separately)	CM	1		
F	One layer 1000 gauge polythene sheet damp proof membrane under beds: 300mm laps m2 2	SM	1		
G	Approved backfill 300mm top layer on the damp proof membrane	CM	1		
	<b>UPVC Pipes</b>				
H	150mm diameter outlet french drain	LM	1		
	<b>Carried to Section Summary</b>				-



**PRIME COST & PROVISIONAL SUM**

Item	Description	Rate	Amount
	<p><u>PRIME COSTS AND PROVISIONAL SUMS</u></p> <p><u>Contingencies</u></p> <p>Allow a Provisional Sum of Kenya Shillings one million (1,000,000.00) for Contingencies.</p>	SUM	1,000,000.00
	Carried to Main Summary		1,000,000.00



# **MAIN SUMMARY PAGE**

MAIN SUMMARY  
BUILDING & CIVIL WORKS

	DESCRIPTION	BILL No.	PAGE No.	Amount
1	PARTICULAR PRELIMINARIES			
2	GENERAL PRELIMINARIES			
3	BUILDERS WORK			
4	MECHANICAL WORK			
5	ELECTRICAL WORK			
6	LANDSCAPING AND HARDSCAPING WORK			
7	SEPTIC TANK AND FOUL DRAINAGE			
8	PRIME COSTS AND PROVISIONAL SUMS			1,000,000.00
	SUB -TOTAL			
	ADD 0.03% PPRA CAPACITY BUILDING LEVY			
	ADD 1% PROJECT MANAGEMENT LEVY PAYABLE TO COUNTY GOVERNMENT OF NYANDARUA REVENUE DEPARTMENT			
	<b>TOTAL CARRIED TO FORM OF TENDER</b>			
	<u>AMOUNT IN WORDS</u>			
	.....			
	.....			
	(Amount inclusive of 16% VAT and withholding Tax)			Name & Signature of Witness
	.....			
	Contractors Signature & Official Rubber Stamp			Address of Witness
	.....			
	.....			
	.....			
	Date			Date
	.....			

