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FROM THE AMERICAN PEOPLE



INFRASTRUCTURE FOR BIODIVERSITY CONSERVATION IN KIDEPO VALLEY NATIONAL PARK

**Construction of Three (3) Ranger Posts
"Karua, Kaekem and Imiliny"**

LOT 2 KAEKEM

CLIENT: Uganda Wildlife Authority

FUNDER: United States Agency for International Development

**BIDDING DOCUMENTS
VOLUME 2 OF 4
BILLS OF QUANTITIES**

Prepared by:

USAID/Uganda A & E Design and Construction Management Services,
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October 2022

**USAID - Infrastructure for Biodiversity Conservation in Kidepo Valley
National Park**

**CONSTRUCTION OF THREE (3) NUMBER RANGER POST
LOT 2 KAEKEM**

DOCUMENTS SUMMARY PAGE

<u>VOL NO.</u>	<u>DESCRIPTION</u>	<u>PAGE No..</u>
Vol 1 of 4	Bidding Procedures SBD Comprising:- Bidding Procedures Employer's Requirements Conditions of Contract Contract Forms	
Vol 2 of 4	Bills of Quantities ; Comprising:- Grand Summary Preliminaries Accomodation Block Kitchen Block Meeting Room Office and Store VIP Latrine Observation Tower External Works	G.S 1 Bill No. 2.1 Bill No. 2.2 Bill No. 2.3 Bill No. 2.4 Bill No. 2.5 Bill No. 2.6 Bill No. 2.7 Bill No. 2.8
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KAEKEM RANGER POST

LOT 2 SUMMARY

BIODIVERSITY INFRASTRUCTURE IN KIDEPO VALLEY NATIONAL PARK

UGANDA WILDLIFE AUTHORITY-KAEKEM RANGER POST

LOT .2 SUMMARY -KAEKEM RANGER POST

	AMOUNT	Units	TOTAL AMOUNT UGX
BILL No. 2.1 : PRELIMINARIES	-	1	-
BILL No. 2.2 : ACCOMODATION BLOCK	-	2	-
BILL No. 2.3 : KITCHEN BLOCK	-	2	-
BILL No. 2.4: MEETING ROOM	-	1	-
BILL No. 2.5: OFFICE AND STORE	-	1	-
BILL No. 2.6: VIP LATRINE	-	2	-
BILL No. 2.7: OBSERVATION TOWER			-
BILL No. 2.8: EXTERNAL WORKS			-
SUB-TOTAL 1			-
 ADD PROVISIONAL SUM FOR CONTINGENCY (5%)			-
SUB - TOTAL 2			-
 ADD VAT 0 %			
GRAND TOTAL KAEKEM			-

RANGER POSTS

PRELIMINARIES

Item	Description	Amount Ugx.
A	<p><u>BILL No. 2.1</u> <u>PRELIMINARIES</u> Preamble: These Preliminaries shall apply to all Volumes of tender and Contract Documents for the project.</p> <p>Names of Parties The following parties wherever they occur shall be interpreted as here under: (i) The Word "Employer" shall be held to mean: Uganda Wildlife Authority (ii) The "Project Manager" for the purposes of this Contract shall be held to mean: Uganda Wildlife Authority (iii) The "Contractor" shall mean: The person or persons partnership, firm or company, whose tender for this work (i.e. the work described in and/or preferred to in Bills of Quantities) has been accepted and shall include the legal successors in title to such person or persons, partnership, firm or company but not (except with consent of the Employer) any assignee(s). (iv) The "Funder" shall be held to mean: United States Agency for International Development (USAID) (v) The "Quality Assurance Consultant" shall mean: MBW Consulting Ltd.</p> <p>Definition of Terms and Abbreviations Terms, phrases and abbreviations shall be deemed to have the following meanings whenever used hereinafter and in all Contract Documents.</p> <p>(i) "Works" shall mean all or any portion of the work described on Page 1/7 of this section of the tender documents and shall include materials and articles, wherever the same are being manufactured or prepared which are to be used in the execution of this Contract and whether the same may be on the site or not.</p> <p>(ii) "Contract" means the Condition of Contract, the Specifications, the Drawings, the Bills of Quantities, the Tender, the Letter of Acceptance, the Contract Agreement and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement.</p> <p>(iii) "Contract Price" means the sum stated in the Letter of Acceptance as the amount payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract.</p> <p>(iv) "Specification" means the specification of the works included in the Contract and any modification thereof or addition thereto made or submitted by the Contractor and approved by the Project Manager.</p> <p>(v) "Drawings" means the drawings, calculations and technical information or a like nature provided by the Project Manager to Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation and maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Project Manager.</p> <p>(vi) "Bills of Quantities" means the priced and completed Bills of Quantities forming part of the Tender.</p> <p>Total carried to collection</p>	<p>-</p> <p>-</p>

2/1/1

Item	Description	Amount Ugx.
A	<p>Definition of Terms and Abbreviations (Cont'd)</p> <p>(vii) "Approved" or "Approval" shall mean as approved by the Project Manager.</p> <p>(viii) "Directed" shall mean directed by the Project Manager at his or her absolute discretion.</p> <p>(viii) "Selected" shall mean as selected and approved by the Project Manager at his absolute discretion.</p> <p>(ix) "Allow" shall mean, the cost of the item is at the risk of the Contractor.</p> <p>(x) "B.S." shall mean the British Standard Specification published by the British Institution, 2 Park Street London, England.</p> <p>(xi) "CP" shall mean the British Standard code of practice, British Standards Institution 2 Park Street London, England.</p> <p>(xii) "As Before" shall mean the whole of the preceding description except as qualified in the description in which it occurs. Where it occurs in description of succeeding items it shall mean the same as in the first description of the Series in which it occurs except as qualified in description, which is contained within the appropriate brackets.</p> <p>(xiv) "Ditto" shall have the same meaning as "As before".</p> <p>(xv) "Necessary", "Proper": Wherever these words occur they shall mean executed to the extent that it must be conducted in a manner or character which is "necessary" or "proper" in the opinion of the Project Manager.</p> <p>(xvi) "As described" shall mean as described in the descriptions of materials and workmanship contained in the General Specifications and/or Bills of Quantities.</p> <p>(xvii) "Provisional Sum" shall mean a sum of money included in the Contract to cover the cost of a portion of the Works, the extent of nature of which is undetermined at the time of preparing the Contract Documents or which cannot be accurately determined until that portion of work is complete. All such sums are to be used as directed by the Project Manager and deducted in whole or in part from the Contract Price if not required.</p> <p>(xviii) "Prime Cost Sum" or "P.C. Sum" shall mean a sum provided for work or services to be executed by a nominated Sub-Contractor, a Statutory Authority or a Public undertaking, or for materials or goods to be obtained from a Nominated Supplier. Such sums shall be deemed to be exclusive of any cash discount or profit required by the Main Contractor. All prime cost sums are to be used as directed together with any profit added by the Main Contractor from the Contract Sum, if not required.</p> <p>(xix) "CM" or M³ shall mean Cubic Metres</p> <p>(xx) "SM" or M² shall mean Square Metres</p> <p>(xxi) "LM" or M shall mean Linear Metres</p> <p>(xxii) "NO." shall mean Number</p> <p>(xxiii) "Prs" shall mean Pairs</p> <p>(xxiv) "mm" shall mean Millimetres</p> <p>(xxv) "KG" shall mean Kilograms(s)</p> <p>Total carried to collection</p>	-

2/1/2

Item	Description	Amount Ugx.
A	<p>Definition of Terms and Abbreviations (Cont'd)</p> <p>(xxvi) "Fix only" The fixing of materials and components obtained from sources as directed. In addition to the actual fixing the term shall mean;</p> <p>(xxvii) Returning any chargeable packings and obtaining credit.</p> <p>(xxviii) "Fuel" shall mean electricity, gas, oil or any other approved source of energy.</p> <p>(xxix) "Approx." shall mean Approximately</p> <p>(xxx) "U.S." shall mean United States of America</p> <p>(xxxi) "E.U." shall mean European Union</p> <p>(xxxii) "Weather" Specified requirements for weather precautions and protection refer to rain, sleet, gales, excessive sunshine, drying winds, flooding or any other state of the weather which could cause damage or otherwise interfere with the execution of the works.</p>	
B	<p>Notices</p> <p>For purposes of this Contract, Notices shall be in writing and shall be delivered by hand or facsimile message against a written confirmation of receipt by registered letter or by telex subsequently confirmed by a letter at the following address: -</p> <p>Employer: Uganda Wildlife Authority</p> <p>Project Manager: Uganda Wildlife Authority</p>	
C	<p>Tenderer to Visit the Site</p> <p>The Contractor will be required to visit the site before tendering. Permission to view the site may be obtained upon application to the Project Manager. The Contractor shall therefore be deemed to have visited the site and satisfied himself as to: -</p> <ol style="list-style-type: none"> 1 The nature of the site 2 The amount of rubbish or debris to be cleared away before commencement. 3 The nature of the soil to be excavated and location of the dumping site. 4 The nature, proximity of adjoining property, buildings and services to be protected and/or diverted. 5 The nature of existing buildings to be retained or demolished 6 The erection and siting of all temporary structures, plant and materials necessary for executing the Works. 7 The existence of adequate supplies of labour, plant and local materials. 8 The requirements for the protection of the environment. 9 The Contractor is to satisfy himself as to any difficulties that the Site may present to make all necessary inquiries to any point which in his opinion requires further elucidation as no claim for lack of information will be accepted. 	
D	<p>Location of Sites</p> <p>(i) The three Sites of the proposed Works are in the Kidepo Valley National park on the following GPS 3.92512°N, 33.81983°E for Karua Ranger Post, GPS 3.76729°N, 33.84393°E for Kaekem Ranger Post and GPS 3.80581°N, 33.63659°E for Imiliny Ranger Post</p> <p>Total carried to collection</p>	-

Item	Description	Amount Ugx.
	<p>(ii) The Contractor shall visit the Site to acquaint himself with the nature and position of the Works to be executed and no claim for extras will be considered on account of lack of knowledge in this respect.</p> <p>(iii) The Contractor must obtain the Project Manager's approval and directions regarding the use of any materials found on site.</p> <p>A Description and Scope of Works</p> <p>The works comprise of construction of Kaekem ranger post comprising of:</p> <p>(i) 2 number accommodation blocks, 2 number kitchen blockS, 2 number VIP latrines, a meeting room, an observation tower, an office with a store, and landscaping to the general site</p> <p>(ii) The buildings comprise concrete block and/or brick walling; steel hollow section in the roof structure; 26 Gauge pre-painted IT4 roofing sheets</p> <p>(iii) Windows; Doors are mainly glazed metallic/mild steel with clear glazing and mahogany solid core flushed doors in mild steel frames painted</p> <p>(iv) External walls are rendered and painted in weather guard paint</p> <p>(v) Internal partitioning and the internal walls are in block work finished with cement sand plaster and finally painted with vinyl wall paint</p> <p>(vi) The internal finishes include; floor finishes of Terrazzo, wall finishes of plaster, paint, and wall tiles and Plastered metal lathe ceilings</p> <p>(vii) Fittings comprise counters, concrete worktops, benches finished with screed</p> <p>B Measurements</p> <p>(i) Measurements used in preparing these Bills of Quantities have been taken off from Architectural and Structural drawings of these documents.</p> <p>(ii) Any unauthorised alteration or qualification made to the text of these Bills of Quantities will be ignored and may cause the tender to be disqualified.</p> <p>(iii) The Bills of Quantities shall under no circumstances be used for the purpose of ordering materials. The Contractor shall make his own computations for purposes of ordering materials.</p> <p>C Drawings</p> <p>(i) The Works are to be executed in accordance with the drawings referred to in these tender documents together with any amendment thereof.</p> <p>(ii) Therefore the Contractor shall be deemed to have examined the drawings before tendering and to have satisfied himself regarding the nature and extent of the works and the method of construction involved. No claim arising out of misinterpretation in any respects will be entertained.</p> <p>D Figured Dimensions</p> <p>Figured dimensions are to be followed in preference to dimensions scaled from the drawings. Before any work is commenced by the Main Contractor, the Sub-Contractor or specialist firms, dimensions must be checked on the site and/or buildings and agreed with the Project Manager irrespective of the comparable dimensions shown on the drawings. The Contractor shall be responsible for the accuracy of such dimensions.</p> <p>Total carried to collection</p>	
		-

Item	Description	Amount Ugx.
A	<p>Samples The Contractor shall furnish at the earliest possible opportunity before work commences and at his own cost any samples of materials or workmanship that may be called for by the Project Manager for his approval or rejection until such samples are approved by the Project Manager and such samples when approved shall be the minimum standard for the work to which they apply.</p>	
B	<p>The Contractor shall also provide Samples of finished work (mock-ups) which shall be deemed to include: - (i) Making the samples with material identical to those to be used in the Works. (ii) Making samples under the same conditions as those likely to exist during the construction of the Works. (iii) Maintaining and protecting approved samples (iv) Remove the samples when no longer required by the Project Manager.</p>	
C	<p>Rejected Workmanship or Materials Any workmanship or materials not complying with specific requirements or approved samples or which have been damaged, contaminated or have deteriorated, must be immediately removed from the site and replaced at the Contractor's expense when required.</p>	
D	<p>Discrepancies in descriptions The Bills of Quantities are to be priced according to the descriptions contained in the items and the relevant drawings and notes thereon and Specifications. In the event of discrepancies appearing between these descriptions or any drawing and specifications issued with tenders, the drawings and notes thereon shall take precedence for the purpose of pricing.</p>	
E	<p>Pricing Preliminaries The Contractor shall price out individually and in detail all the items carrying a monetary value in this and any other section of the Bills for Quantities as required and under no circumstances will lump sums be allowed unless otherwise stated to the contrary in the tender documents. Any item not priced either in the Preliminaries Bill or elsewhere in the Bills of Quantities, will be deemed to have been allowed for in the prices inserted against other items in the Bills of Quantities.</p>	
F	<p>Materials for the Works The Contractor will be entirely responsible for obtaining all materials required for the Works, whether local or imported and for, paying all costs and charges necessary, including all ordering, shipping or air freight, clearance, transport to site, intermediate storage, and storage on site, insurance, security, documentation, licenses, national and international taxes and any other related tariffs</p>	
G	<p>Legally demandable taxes (i) The Contractor shall allow for making any legally demandable payments due in respect of works and hoardings, and of workpeople employed by him to Local or Central Government Authorities and bodies.</p>	
	Total carried to collection	-

2/1/5

Item	Description	Amount Ugx.
A	<p>No exemption from duty and other tax payments</p> <p>The prices tendered by the Contractor shall include all customs duties, import duties, business taxes, income and other taxes that may be levied according to the laws and regulations in being in Uganda as of the date 28 days prior to the closing date of submission of tenders on the Construction Plant, materials and supplies (both permanent, temporary and consumable) acquired for the purpose of the contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from his responsibility to pay any tax that may be levied in Uganda on profits made by him in respect of the Contract.</p>	
B	<p>Import Licenses</p> <p>The Contractor will be entirely responsible for obtaining all import licenses and other documents required by the regulations of the Government of Uganda.</p>	
C	<p>Access to Site</p> <p>Access to the Site shall be agreed with the Project Manager on approval by the Employer prior to the commencement of the Works and the Contractor must allow for providing, forming and maintaining all temporary crossings and access roads onto the site, removing same on completion and making good any damaged or disturbed surfaces as directed by and to the approval of the Project Manager.</p>	
D	<p>Procedure</p> <p>(i) The Contractor shall proceed with the works in such a manner and such order as the Project Manager may direct.</p> <p>(ii) External works may be carried out in any order of priority.</p> <p>(iii) From the time of starting work on each part of the building the works therein must proceed diligently and continuously until completed and ready for handing over.</p>	
E	<p>Preparation of Site, Works etc.</p> <p>The Contractor shall allow for all necessary preparation of the Site, Works and materials prior to commencement of construction. The Contractor shall allow for any necessary site clearing including removal of rubbish and refuse and preparation of construction all in accordance with the Project Manager's Instructions. No claims for extras in respect of expenses involved in opening up and preparing the site and works for construction will be allowed and the Contractor must satisfy himself as to the extent of the work involved.</p>	
F	<p>Programme and Progress</p> <p>The Contractor shall furnish to the Project Manager for approval and display in the site offices, a Programme and Progress Chart devised in such a way that the lined programme is shown and progress can be marked up as the work proceeds. The Contractor shall keep this chart up to date at all times</p>	
	Total carried to collection	-

Item	Description	Amount Ugx.
A	<p>Progress Photographs The Contractor shall display at least (5) five progress photographs of appropriate sizes of the completed works on a board fixed in the Site Meeting Room taken once every month by an automatic Camera with time recording facility throughout the duration of the Contract.</p>	
B	<p>Blasting Blasting will only be allowed with the express permission of the Project Manager and in accordance with any Government Regulations currently in force or other conditions set by the Project Manager.</p>	
C	<p>Day works</p> <p>(i) The Project Manager may, if in his opinion it is necessary or desirable, order in writing that any additional or substituted work shall be executed on a Day work basis. The Contractor shall then be paid for such work in accordance with Day work rates and percentage additions inserted in the tender Bills of Quantities by the Contractor or as shall be agreed with the Project Manager.</p> <p>(ii) The Contractor shall furnish to the Project Manager all receipts or vouchers as may be necessary to prove the amount paid and before ordering materials he shall submit to the Project Manager quotations for the same for approval.</p> <p>(iii) In respect of work executed on a Day work basis the Contractor shall, during the continuance of such work, deliver each day to the Project Manager a list in duplicate of the names occupation and time of all workmen employed on such work and statement also in duplicate showing the description and quantity of all materials and plant used thereon or therefore (other than plant which is included in the percentage additions on net amount of wages). One copy of each list and statement will, if correct or agreed, be signed by the Project Manager and returned to the Contractor. At the end of each month the Contractor shall deliver to the Project Manager priced statement of the labour, materials and plant (except as aforesaid) used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered.</p> <p>(iv) Provided always that, if the Project Manager shall consider that for any reason the sending of such list or statement by the Contractor in accordance with the foregoing provision was impracticable, he shall nevertheless be entitled to authorise payment for such work either as Day work (on being satisfied as to the time employed and plant and materials used on such work) or at value thereof as he shall consider fair and reasonable.</p>	
D	<p>General Allow for expenses in connection with the testing of materials as required by the Project Manager including the supply and preparation of materials to be tested, the cost of materials and their packing and conveyance to the nearest approved testing laboratory.</p>	
	Total carried to collection	-

2/1/7

Item	Description	Amount Ugx.
<p>A</p> <p><u>Concrete Tests</u></p> <p>Allow for making all necessary concrete test cubes and testing at an approved laboratory. At least three test cube must be collected at every primary stage of concrete casting that is during the casting of the concrete foundations, groundfloor slab and ring beam with a minimum of nine test cube per building structure. Additional concrete test may be requested by the project manager.</p> <p>One copy of the test cube report shall be forwarded direct to the Project Manager by the Laboratory officials.</p> <p>An accurate record of all test cubes taken and crushed must be kept on site and the Contractor will only be reimbursed for successful tests upon the production of Laboratory Certificates.</p> <p>B</p> <p>Valuation of Lump Sum Preliminaries Cost</p> <p>Lump Sums entered in these Bills of Quantities against any item of General Conditions of Preliminaries will be included in appropriate Valuation according to reasonable assessment of actual costs involved in the item. Any balance between this assessment and the actual sum entered in the Bills of Quantities will be included in subsequent valuations monthly instalments over the balance of the Contract Period.</p> <p>C</p> <p>Payment for Materials on Site</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.</p> <p>D</p> <p>Priced Bills of Quantities</p> <p>(i) All items in these Bills of Quantities must be priced in INK. No alterations of quantities or descriptions made by the Tenderer will be allowed</p> <p>(ii) Should the priced Bills of Quantities of the Tenderer recommended for acceptance show errors in pricing and/or in arithmetical (after a complete technical and mathematical check) the difference between the tender figure and the correct figure shall be computed and the prices of the "Builder's' Work" (i.e. the arithmetically correct figure less all P.C. and Provisional sums and Contingencies) shall be adjusted either by amending individual rates by agreement by a percentage adjustment calculated upon the total amount of such errors in relation to the value of "Builders' work" so that the corrected figure shall be taken and maintained as the tender amount.</p> <p>(iii) Variations of "Builders' work" will be subject to the same amended rates of percentage of adjustment.</p> <p>E</p> <p>Working and Storage Space</p> <p>(i) The Contractor will be restricted to within the boundaries of the site for all operations.</p> <p>(ii) The Contractor shall obtain the approval of the Project Manager for the siting of all temporary buildings, access roads and paths, storage area for materials and spoil heaps.</p> <p>(iii) The Contractor shall allow for storage of site materials off site with approval and authorisation of the project manager.</p> <p>Total carried to collection</p>		
	Total carried to collection	-

2/1/8

Item	Description	Amount Ugx.
A	<p>Visitors to the Site The Contractor is required to control all visitors to the site and to keep out unauthorized persons and shall provide a visitor's book which all authorised persons including the Project Manager, his representatives and the Employer's staff sign therein.</p>	
B	<p>Provisional Work All work measured provisionally shall be left uncovered for a reasonable time to allow measurements needed for such adjustment to be taken by the Quantity Surveyor. The Contractor shall immediately notify the Quantity Surveyor when such work is started and completed</p>	
C	<p>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 Project Manager's order shall be added to the Contract Price. Such work shall be valued as described for variations in Clause 54 of the Conditions of Contract. The Contractor shall under all circumstances execute no work or incur any expense upon items of work for which provisional sums are stated without written approval from the Project Manager. Where the Contractor wishes to do such work he shall first submit a quotation for approval by the Project Manager.</p>	
D	<p>Prime Cost Sums</p> <p>(i) The Prime Cost Sums shall be expended as directed by the Project Manager or deducted in whole or in part if not required</p> <p>(ii) The Contractor will be responsible for the Administration of all Nominated Suppliers in accordance with the Conditions of Contract and will be required to arrange an approved programme for delivery of materials with each supplier.</p> <p>(iii) The Contractor will be responsible for the supervision and administration of all Nominated Sub-Contractors in accordance with the Conditions of Contract and will be required to arrange an approved programme with each Nominated Sub-Contractor.</p> <p>(iv) The Contractor shall allow for general attendance upon Nominated Sub-Contractors and for affording them all reasonable specific attendance facilities for carrying out their works simultaneously with his own.</p> <p>(v) Provision is made after each prime cost sum for the pricing of the foregoing under two headings: -</p> <p>(1) Add Profit</p> <p>(2) Allow for general attendance</p> <p>(vi) Where Builder's work is required from the Contractor, he must obtain from Nominated Sub-Contractor particulars of positions in which chases, holes, mortices, etc., will be required so as to avoid unnecessary cutting away. No claim will be considered for the extra cost of cutting away work already built as a result of the Contractor's failure to obtain sufficient particulars.</p>	
	Total carried to collection	-

2/1/9

Item	Description	Amount Ugx.
	<p>(vii) Any percentage addition made by the Contractor against an item of 'Add for Profit' beneath a Prime Cost Sum will be deducted from the Contract Sum and in lieu thereof he will be paid the said percentage of the actual amount directed to be expended in respect of that particular Prime Cost Sum.</p> <p>A Project Manager's Inspection No work shall be covered up until it is inspected and approved by the Project Manager. The Project Manager can at any time up to the end of the Defects Liability Period instruct the Contractor to open up, pull down, test or expose any part of the works in order to satisfy himself as to the quality of the materials or workmanship used. If in the opinion of the Project Manager, such parts are not in strict accordance with the Contract documents he may order the Contractor to remove all defective work, replace with approved materials and reinstate any such part of the work disturbed at his own expense and to the entire satisfaction of the Project Manager. If any such part of the Works are found to be in accordance with the Contract Documents the Contractor will be reimbursed the net cost of his expense in this connection.</p> <p>B General Matters Tools and Plant (i) The contractor shall provide all necessary tools and equipment and other requisites necessary for the proper execution of the Works including but not limited to excavating and loading equipment, water pumping equipment, transport plant, cranes, hoists and lifts, concrete mixers, dumpers, vibrators, generator, tarpaulins, tools, moulds and templates. (ii) Allow for removing and reinstating, adapting from time to time as may be necessary and maintaining all plant and equipment during the course of the Contract. (iii) The Contractor is to provide everything necessary for the proper execution of the works according to the true intent and meaning of Drawings, etc., whether the same may or may not be particularly shown on the drawings or described in the Bills of Quantities provided that the same is reasonably to be inferred there from.</p> <p>C Safety, Health and Welfare of Workpeople The Contractor shall allow for providing for the safety, health and welfare of workpeople and for complying with any relevant Ordinances, Regulations or Union Agreement and the safety requirements for working on buildings in accordance with the Conditions of Contract. The Contractor shall allow for routine sensitizing and training of workpeople about HIV, AIDS and other sexual transmitted diseases (STDs) including providing prevention methods such as condoms, specialised first aid kit and a fully trained personnel to handle emergency in accordance with the Conditions of Contract.</p> <p>D Holidays and Transport for Workpeople The Contractor shall allow for providing holidays and transport for workpeople and for complying with any relevant Ordinances, Regulations or Union Agreement</p> <p>Total carried to collection</p>	<p>-</p>

2/1/10

Item	Description	Amount Ugx.
<p>A</p>	<p>Protection of Works and Persons</p> <p>(i) The Contractor shall allow for protection of his own and his Sub-Contractor's work liable to damage, including provision of temporary roof, gutters, drains etc., if necessary and shall case-up, cover, or in other suitable ways protect all finished work liable to injury, to the satisfaction of the Project Manager until completion of the Contract.</p> <p>(ii) From the beginning to the completion of the Works, the same shall be under the entire care and control of the Contractor, who shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holders or occupiers of surrounding properties and to the public generally and shall at all times keep all paths and roads affected by the works in safe and clear state, and shall use proper precautions to ensure the safety of ask wheeled traffic and pedestrians. The Contractor shall allow for providing all watching, lighting, barriers, covering open trenches and protection of the works including sub-contract works, as may be necessary for the safety of the works and the existing buildings and for the protection of the public and his own and Sub-Contractors' employees.</p> <p>(iii) In the event of any damage or loss occurring to the works, or to materials or to any sewers, gullies, drains, paths or other works on site in temporary possession of the Contractor for the purpose of this Contract, either from the weather, want of proper protection, defects, theft, insufficiency of the Works, or any other cause whatsoever during the progress of the Works, or for any accident or damage to property or persons by reason of the said works, the Contractor alone shall be responsible and shall without extra charge make good all damage and pay all costs incurred.</p>	
B	<p>Police regulation</p> <p>The Contractor shall allow for complying with any relevant Police regulations</p>	
C	<p>Water for the Works</p> <p>The Contractor shall allow for providing all temporary clear water supplies required for the Works, including Sub-Contract works, together with all necessary storage tanks and distribution systems for the same and must allow for bearing all expenses incurred and paying for all water consumed without charge to any Sub-Contractor.</p>	
D	<p>Lighting and Power for the Works</p> <p>The Contractor shall allow for providing all temporary lighting and power supplies required for the Works, including Sub-Contract works, together with all necessary distributions for the same and must allow for bearing all expenses incurred and paying for all power consumed without charge to any Sub-Contractor.</p>	
E	<p>Crossing and Temporary Roads</p> <p>The Contractor must allow for providing, forming and maintaining necessary crossings on to the site and temporary roads as may be required by the Project Manager, removing same at completion and making good damaged or disturbed surfaces as directed by and to the approval of the Project Manager.</p>	
	<p>Total carried to collection</p>	<p>-</p>

2/1/11

Item	Description	Amount Ugx.
A	<p>Contractor Site Offices The Contractor must allow for erecting and maintaining on the site, in such positions as may be directed, adequate site offices for the use of his own site staff and removing same at completion and making good all surfaces disturbed.</p>	
B	<p>Project Manager & Clerk of works offices (i) The Contractor must also allow for erecting and maintaining of two number lockable office for the sole use of the Project Manager and Clerk of Works complete with desk, chairs and cupboards. The offices shall be sufficiently large enough to permit the Project Manager to hold monthly site meetings. The Contractor must allow for light and power supplies to the Clerk of Work's office and an attendant for cleaning. The Contractor must provide, erect and maintain closet and wash hand basin for the sole use of the Project Manager and other associates, including all plumbing installations and paying all service charges. (ii) The Contractor shall provide an approved secure room for the storage of samples (iii) The Contractor shall also provide an approved type of up to date Laptops and printer for the use of the Project Manager's representatives and the Clerk of Works.</p>	
C	<p>Site Meetings Site Meetings will be held at the Site meeting room set up on site by the Contractor at monthly intervals or as directed otherwise, and the Contractor shall provide lunch and refreshments to all persons attending the regular scheduled site meetings for all the construction period whose menus are to be decided by the Project Manager</p>	
D	<p>Stores for Materials etc. The Contractor shall provide, erect and maintain on the site, in such positions as may be directed, ample temporary watertight lock-up sheds or buildings necessary for proper storage and protection of materials liable to damage and shall remove the same on completion and make good all surfaces disturbed.</p>	
E	<p>Sanitation of the Works (i) The Contractor shall allow for providing the necessary latrines for the labour employed on the Works, including labour employed by Sub-Contractors, to the satisfaction of the Health and Medical Authorities and for maintaining the same in a thoroughly clean and sanitary condition and paying all conservancy fees. (ii) The Contractor shall allow for removing the said latrines, filling pits with hardcore and marram and leaving the ground clean, free from pollution upon completion of the Works to the satisfaction of the Health and Medical Authorities.</p>	
F	<p>Workmen's accommodation No site accommodation for workers shall be permitted</p>	
G	<p>Hoarding and Screening (i) The Contractor shall allow for providing all necessary hoarding constructed in new gauge 30 pre-coated iron sheets on treated timber or other approved framework with lockable gates in the areas that work is to be carried out(site) to approval of the Project Manager and Local Authority.</p>	
	Total carried to collection	-

2/1/12

Item	Description	Amount Ugx.
	<p>(ii) The Contractor shall also allow for providing and fixing of appropriate plastic canvas or other approved works' screening during construction to prevent falling building materials/tools, debris, particles, dust etc., from injuring the lower completed works, adjacent properties, persons and vehicles on the neighbouring roads and buildings to approval of the Project Manager and Local Authority.</p> <p>(iii) The Contractor shall allow for thoroughly maintaining all such protective and other devices throughout the contract and clearing away and making good disturbed ground on completion.</p> <p>A Scaffolding The Contractor shall allow for providing, erecting and dismantling all general steel scaffolding required for the Works. The Contractor must allow here or in his rates for providing all special scaffolding required by his Sub-Contractors carrying out works for which P.C. sums are included in these Bills of Quantities.</p> <p>B Site Administration and Security The Contractor shall provide and maintain qualified technical and administrative personnel on site, fluent in English with suitable and relevant office equipment like Computers and furniture and he shall provide and maintain appropriate armed security for proper protection of the Works, Materials and plant at the site to the approval of the project Manager.</p> <p>C Temporary Telephone and Internet for use on the Site The Contractor shall provide, install and maintain temporary telephone and internet facilities for his use by Clerk of Works and other personnel engaged in the implementation of the project.</p> <p>D Existing Services (i) The Contractor shall ascertain from the relevant authorities and by investigation, the exact location of existing services including telephone, electricity, water supply, sewer line and storm water drainage. He shall make whatever provision to the Authority concerned or the Project Manager may deem necessary for the proper protection of such services. Any damage or disturbance of such services shall be reported to the relevant authority and to the Project Manager and shall be made good to their satisfaction at the Contractor's expense .</p> <p>(ii) The Contractor shall allow for any expense involved in the diversion of electric cables, telephone lines, water pipes, public sewer and storm water drainage etc., that may be required during the execution of the Contract.</p> <p>E Maintenance of Public and Private Roads The Contractor is to allow for maintaining all public and private roads in the vicinity of the site and to pay for or make good any damages caused to roads, kerbs, surface water drainage etc., occasioned by heavy traffic, delivery of materials and building operations generally to the entire satisfaction of the Project Manager and the Local Authority and shall be responsible for observing any bye-law or authority regarding keeping the road free from mud, filth etc., arising out of the execution of the Works.</p> <p>Total carried to collection</p>	
		-

2/1/13

Item	Description	Amount Ugx.
A	<p>Removing Rubbish and Clearing</p> <p>The Contractor must allow for removing and clearing away all surplus excavated materials, rubbish, unused materials and plant both during and at the completion of the Works and shall leave the whole of the site and Works in a clean and tidy state to the satisfaction of the Project Manager including clearing away and making good all traces of temporary access roads, offices, sheds, camps etc., if any. Particular care shall be taken to leave clean all floors, windows and doors and to remove all paint and cement stains, clean down external faces, wash off stains to faced work, flush out plumbing installations and drain runs. The Contractor is to find his own tip/dump and shall pay all charges in connection therewith.</p>	
B	<p>Signboard</p> <p>The Contractor shall make and erect a signboard for each site in accordance with details provided by the Project Manager and to the standard and regulation said by USAID for branding and signage, to display the name of the project, Employer's name and names of the Project Managers, the Contractor, the Funder and Quality Assurance Consultant. No Sub-Contractor's names will be allowed on this board without the written approval of the Project Manager.</p>	
C	<p>Liability for Defects</p> <p>Defects, shrinkage or other faults which are attributed by the Project Manager to work executed under this Contract shall be made good by the Contractor at his own cost.</p>	
D	<p>Works to be delivered clean</p> <p>On completion of the Contract, the site and the Works shall be cleared of all plant, scaffolding, temporary structures, rubbish and unused materials and shall be delivered up clean and in perfect condition in every respect to the satisfaction of the Project Manager. Particular attention is to be paid to leave all windows, doors, floors, walls and fittings clean and removing all paint and cement stains, including unblocking gutters, drains and channels.</p>	
A	<p>Occupation Certificate</p> <p>The Contractor shall apply for and obtain the Occupation Certificate from the Local Authority at the completion of the Contract in accordance with the conditions laid down in the current bye-laws of the Local Authority and shall pay all expenses connected thereof.</p>	
B	<p><u>FORM OF CONTRACT</u></p> <p>The Form of Contract under which the Contractor shall enter into a Contract with the Employer is the Uganda Conditions of Contract for Procurement of Works, Septemer 2019 Edition, published and issued by the Public Procurement and Disposal (of Public Assets) Authority (PPDA), The Contractor shall allow for complying with the Conditions of Contract that involve expenses to him either here or elsewhere in his prices, in particular but not limited to the following Clauses: -</p>	
	<p>Total carried to collection</p>	<p>-</p>

2/1/14

Item	Description	Amount Ugx.
A	<p>Clause 18 pertaining to Insurance and securities: The Contractor shall provide in joint names of the Employer and Contractor the following:</p> <p>18.1 (a) Insurance for loss of or damage to the Works, plant and materials. 18.1 (b) Loss of or damage to equipment. 18.1 (c) Loss or damage to property in connection with the Contract and 18.1 (d) Personal injury or death 19. Site investigation Report 61. Performance Security</p>	
	Total carried to collection	-

2/1/15

Item	Description	Amount Ugx.
	<u>COLLECTION</u>	
	Page 2 / 1/ 1	-
	Page 2 / 1/ 2	-
	Page 2 / 1/ 3	-
	Page 2 / 1/ 4	-
	Page 2 / 1/ 5	-
	Page 2 / 1/ 6	-
	Page 2 / 1/ 7	-
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	Page 2 / 1/ 11	-
	Page 2 / 1/ 12	-
	Page 2 / 1/ 13	-
	Page 2 / 1/ 14	-
	Page 2 / 1/ 15	-
	Total carried to collection	-

2/1/16

KAEKEM RANGER POST

ACCOMODATION BLOCK

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.2</u>				
	<u>ACCOMODATION BLOCK</u>				
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES</u>				
	<u>ALL PROVISIONAL</u>				
	<u>The work in this element includes all works up to and including the ground floor slab</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Excavate oversite average 200mm deep to remove vegetable top soil; remove from site	SM	265		
D	Mass excavation to reduce levels not exceeding 1.5 meters deep from stripped level.	CM	130		
E	Excavate for foundation trench not exceeding 1.5 meters deep from reduced level.	CM	210		
G	Extra over excavations for excavating in rock.	CM	20		
H	Return fill and ram selected excavated material around foundations.	CM	160		
J	Load and cart away surplus excavated material from site.	CM	10		
K	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	CM	170		
L	Approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	72		
M	200mm Thick bed of hand packed stone base, well rolled and compacted.	SM	180		
N	50mm thick stone dust blinding over surfaces of hardcore	SM	180		
P	Prepare and apply Chlorpyrifos insecticide treatment or equal and approved to; surface of 50mm thick blinding, tops of foundation walling, sides and bottoms of excavations	SM	300		
	<u>CONCRETE WORK</u>				
	<u>PLAIN CONCRETE CLASS 10; 20mm AGGREGATE : in</u>				
Q	50mm Thick blinding layer under strip foundations	SM	110		
	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 18mm AGGREGATE : in</u>				
R	100mm thick ground floor slab	SM	180		
S	Extra over concrete for slab thickening	CM	2		
	TOTAL CARRIED TO COLLECTION				-

.2.2/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED MASS CONCRETE CLASS 25; 20mm AGGREGATE : in</u>				
A	Strip foundations	CM	24		
B	100mm Thick ramp laid to slope not exceeding 150 to horizontal, including forming 25 x 20mm deep V-groove bands	SM	6		
C	Ground beams	CM	7		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u>				
	<u>MILD STEEL ROUND BARS TO BS 4449</u>				
D	8mm Diameter bars	KG	350		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
E	12mm Diameter bars	KG	600		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
F	No. A142 Fabric Mesh reinforcement weighing 2.2.22 kg. per square meter fixed in slab	SM	180		
	<u>FORMWORK TO</u>				
G	Sides of ground beams	SM	75		
H	Sides of strip foundation	SM	80		
J	Edges of slabs 75 to 150mm high	LM	98		
	<u>DAMP PROOF COURSES</u>				
K	1000 Gauge polythene sheeting laid on blinded hardcore	SM	180		
	<u>WALLING</u>				
	<u>Solid concrete blockwork load bearing (7.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar : with and including hoop iron wall ties every alternative course : in</u>				
L	200mm Thick walls	SM	210		
	<u>TWO COATS EXTERNAL CEMENT RENDER (1:4) finished with wood float</u>				
M	12mm thick to walls	SM	86		
	<u>TWO COATS BLACK BITUMASTIC paint : on</u>				
N	Rendered walls	SM	86		
	<u>SPLASH APRON</u>				
	<u>MARRUM FILL in splash apron</u>				
P	150mm thick approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	SM	36		
	TOTAL CARRIED TO SUMMARY				-

.2.2/1/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 20mm AGGREGATE : in</u>				
A	100mm thick splash apron slab	SM	40		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
B	No. A142 Fabric Mesh reinforcement weighing .2.22 kg. per square meter fixed in slab	SM	40		
	<u>CEMENT AND SAND (1:3) SCREEDS finished smooth</u>				
C	25mm Thick paving	SM	40		
	<u>Splash apron drainage channel</u>				
	<u>300mm diameter (internal) drainage channel comprising : 100mm Thick reinforced concrete Class 25 : sides and bases reinforced with A142 BRC fabric mesh reinforcement; finished with Colas SBS water proofing on cement sand screed; : including excavation, disposal and formwork as per Architects detailed drawing</u>				
D	500 x 300mm deep(average depth) channel	LM	40		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total brought forward from Page .2.2/1/1				-
	Total brought forward from Page .2.2/1/2				-
	Total brought forward from Page .2.2/1/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.2/1/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2 ACCOMODATION BLOCK ELEMENT NO.2.2 R.C. FRAME CONCRETE WORK VIBRATED REINFORCED CONCRETE CLASS 25; 20mm AGGREGATE : in				
A	Ring beams STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks	CM	7		
	MILD STEEL ROUND BARS TO BS 4449				
B	8mm Diameter bars	KG	350		
	HIGH TENSILE RIBBED BARS TO BS 4449				
C	12mm Diameter bars	KG	600		
	FORMWORK TO:				
D	Sides and soffits of ring beams	SM	90		
	Structural Steelwork THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS				
	Structural Steelwork : framed : one coat red-oxide primer;				
E	100mm diameter x 4mm thick x 3200mm high circular hollow section(CHS) pipe support with bottom end welded to 110 x 110 x 6mm thick plate set in and including concrete (1:3:6) base size 200 x 300 x 300mm deep and 100 x 80 x 6mm U-plate welded on top end and general painting.	NO	14		
F	100 x 50 x 3mm RHS beam or horizontal supports	KG	300		
	TOTAL CARRIED TO SUMMARY				-

.2.2/2/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2				
	ACCOMODATION BLOCK				
	ELEMENT NO.3				
	WALLING & PARTITIONS				
	PRECAST CONCRETE CLASS 20; 20mm AGGREGATE : finished fair on all exposed surfaces including bedding and jointing in cement sand (1:3) mortar				
A	150 x 200mm Lintels	LM	57		
	BLOCK WORK				
	Solid Concrete blockwork load bearing (7.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar with and including hoop iron wall ties every alternative course : in				
B	150mm Thick walls	SM	355		
	DAMP PROOF COURSE OF BITUMEN FELT TO B.S 743 Type A with 150mm laps including cement and sand (1:3) levelling bed				
C	150mm Wide	LM	130		
	BURNT CLAY BRICKS VENTS, 200mm thick filled with Kajjansi ventilation bricks or equal and approved secured, bedded, jointed and pointed in cement sand mortar (1:3) with and including insect/bat proof netting complete with all necessary timber framing.				
D	Vent 01 1200 wide x 200mm high	NO	12		
E	Vent 02 Size 1000 wide x 200mm high	NO	12		
F	Vent 03 Circular 600mm diameter	NO	2		
	Approved mild steel diamond shaped mesh welded to 25x25x2mm angle frame secure in concrete floor and Mild steel CHS pole as per architectural detail				
G	900 x 1200mm partition	NO	14		
	TOTAL CARRIED TO SUMMARY				-

.2.2/3/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2 ACCOMODATION BLOCK ELEMENT NO.4 ROOF AND RAINWATER DISPOSAL Structural Steelwork THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS The following in metallic trusses with and including all, bolting, knotting, welding works, connections, hoisting and fixing approximately . 4.0 metres above existing ground level The following are 6 number Truss type T1;				
A	50 x 50 x 3mm RHS Top chord	KG	385		
B	50 x 50 x 3mm RHS Bottom chord	KG	240		
C	40 x 40 x 3mm RHS Intermediate members	KG	280		
D	40 x 40 x 3mm Angles roof wind bracing	KG	130		
E	150 x 50 x 25.5 x 2mm Z - Purlins weighing 4.33 Kg. per meter: bolted	KG	920		
	SUNDRIES				
F	200 x 200 x 6mm Plate: 4 No holes for 20mm diameter J-bolts	NO	26		
G	16mm Diameter J bolt; 250mm Long; head, nut and washers	NO	104		
	ROOF COVERING				
	26 Gauge pre-painted IT4 roofing sheets : fixed to Z-purlins with J-bolts : in				
H	Sheet laid to attain a slope of 22.5 degrees from horizontal.	SM	240		
J	300mm Wide ridge flashing	LM	21		
	MILD STEEL, GRADE GJ				
M	230 x 2mm thick plate fascia; curved to form groove to the edges welded onto steel rafters; one coat red oxide primer	LM	65		
	TOTAL CARRIED TO COLLECTION				-

.2.2/4/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>RAIN WATER DISPOSAL</u>				
	<u>PVC Key terrain fixed in accordance with manufacturer's instructions</u>				
	Terrain water system or other equal and approved 250 wide x 150mm deep x 3mm thick				
A	U-shaped PVC rainwater gutter fixed fascia board with holding clumps secured with approved bolts	LM	42		
B	110mm diameter PVC down pipe	LM	16		
C	Extra over gutter for outlet to suit 110mm diameter pipe.	NO	4		
D	Extra over gutter for valley hoppers	NO	4		
E	Ditto for bends.	NO	4		
F	Extra over for bends.	NO	4		
G	Extra over for horse shoe.	NO	4		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total carried forward from Page .2.2/5/1				-
	Total carried forward from Page .2.2/5/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.2/4/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2 ACCOMODATION BLOCK ELEMENT NO. 5 DOORS TIMBER DOORS 45mm THICK SOLID CORED FLUSH DOORS faced both sides with 6mm plywood veneer: to Architect's approval with hardwood lipping all round; all to Architect				
A	Single swing door D1PV Size 900 x 2100mm high	NO	6		
	METAL WORK PURPOSE MADE DOOR FRAMES AS MANUFACTURED BY ROOFINGS OR EQUAL AND APPROVED: Standard Steel door section complete with fixing accessories; one coat red oxide primer; all to Architect's detailed drawing				
B	210mm girth rebated to profile x 2mm thick steel frame	LM	33		
	PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on metal work : to				
C	Surfaces 200 - 300mm girth	LM	33		
	PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on wood work : to				
D	General surfaces	SM	26		
	SUPPLY AND FIX the following ironmongery : locks and furniture where applicable are to be equal to those manufactured by "HAFELE" and approved by the Architect				
	Set 1 (D2)				
E	Stainless steel startec Size 100x76x2.00mm hinges	Prs.	9		
F	Stainless door lock set; Cat No. 911.2.24.008; complete with escutcheons	NO	6		
G	Push Plates; Cat No. 987.11.300	NO	6		
H	25mm rubber door stop plugged to floor; Star tec ; Cat No. 937.11.711	NO	6		
	TOTAL CARRIED TO COLLECTION				-

.2.2/5/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>METALLIC WORK</u>				
	<u>Purpose made steel casement Doors manufactured from standard casement 2.0mm thick sections : manufacture, assemble and deliver to site: supply and fix all approved UNION or equal ironmongery : with and including door frames, 2mm thick impact plates, 20 x 20 x 2mm SHS burglar proof grils, fixing drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</u>				
A	Door D1 overall size 1000 x 2100mm high (overall) as per Architect's detailed drawing	NO	12		
	<u>Glass and Glazing</u>				
B	6mm thick clear sheet glass to metal doors with putty	SM	4		
	<u>PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on metal work : to</u>				
C	Metallic surface	SM	60		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total carried forward from Page .2.2/6/1				-
	Total carried forward from Page .2.2/6/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.2/5/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2				
	ACCOMODATION BLOCK				
	ELEMENT NO. 7				
	WINDOWS				
	WROT-MAHOGANY selected, treated and kept clean				
A	Timber brackets including 25mm stainless steel curtain rod fixed PREPARE AND APPLY THREE Coats gloss oil paint in accordance with manufacturer's instructions : on wood : to	LM	32		
B	Surfaces 200 - 300mm girth METAL WORK	LM	32		
	PURPOSE MADE STEEL CASEMENT WINDOWS manufactured from standard window casement 2.0mm thick sections : manufacture, assemble and deliver to site: supply and fix sliding aluminium insect mesh and shutters and approved mesh, ironmongery comprising approved hinges, pivoting mechanisms, stays, fasteners to opening lights: provide permanent vents: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery, as per Architect's detailed drawing.				
	The bidder is advised to study the architectural drawings carefully and consult the architect in case of doubt as no claim will be entertained on ground of inadequacy of description of any item.				
F	Window W01 Size 1200 x 1200mm high (overall) PURPOSE MADE STANDARD Steel burglar proofing made from 20 x 20 x 2mm SHS and 40 x 3mm flats : one coat red oxide primer as per Architect's detailed drawing	NO	12		
J	Window W01 Size 1000 x 600mm high (overall) Glass and Glazing	NO	12		
C	5mm thick clear sheet glass to metal windows with putty PREPARE SURFACE AND APPLY ETCHING PRIMER; apply one coat primer, one undercoat and two Gloss finishing coats; on metal work : to	SM	15		
D	Metallic Windows	SM	30		
E	Burglar proofing	SM	30		
	TOTAL CARRIED TO SUMMARY				-

.2.2/6/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2 ACCOMODATION BLOCK ELEMENT NO.7 EXTERNAL FINISHES WALL FINISHES CEMENT AND WASHED SAND (1:3) RENDER trowelled smooth				
A	12mm Thick to walls.	SM	66		
	PAINTING AND DECORATING PREPARE AND APPLY THREE COATS first grade weatherguard emulsion paint : externally; on				
B	Rendered surfaces	SM	66		
	PIGMENTED TYROLEAN, CEMENT AND WASHED SAND sprayed onto;				
C	10mm thick three layer work to concrete surfaces and including 13mm cement and sand (1:3) base	SM	40		
	TOTAL CARRIED TO SUMMARY				-

.2.2/7/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.2				
	ACCOMODATION BLOCK				
	ELEMENT NO.8				
	INTERNAL FINISHES				
	FLOOR FINISHES				
	CEMENT AND SAND (1:4) SCREEDS finished to the floor				
A	45mm thick finished smooth	SM	180		
B	20 x 120mm skirting rounded edge top	LM	260		
	WALL FINISHES				
	INTERNAL LIME PLASTER First coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth				
C	18mm Thick two coat work to walls	SM	700		
	PREPARE AND APPLY ONE MIST COAT AND THREE COATS silk vinyl emulsion paint internally on:				
D	Plastered surfaces	SM	700		
	CEILING FINISHES				
	Expanded Metal Lath Plastered ceiling comprising, expanded metal lath weighing 2.5kg/m2, staple to 100 x 50mm joist, 50 x 50mm branderings softwood framing(m.s) at 600mm centres both ways; metal lath nailed onto framework; 15mm cement sand (1:4) pricking course including 12mm lime plaster				
E	Ceiling	SM	130		
F	Extra over 50 mm High x 10 mm wide cornice to Architects details	LM	180		
G	Extra over for 600 x 600mm trap door	NO	6		
	Internal lime plaster first coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth				
	15mm thick to metal lathe ceiling	SM	130		
	PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint : on				
H	Ceiling soffits	SM	130		
J	Ditto; 75mm thick cornice	LM	180		
	TOTAL CARRIED TO SUMMARY				-

.2.2/8/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<p><u>BILL No. 2.2</u> <u>ACCOMODATION BLOCK</u> <u>ELEMENT NO. 9</u> <u>JOINERY FITTINGS</u> <u>RATES FOR ALL JOINERY WORKS MUST INCLUDE ALL ACCESSORIES AND FITTINGS; PAINTING AND DECORATIONS; IRONMONGERY; AS PER ARCHITECT'S DETAILED DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS REQUIRED ON THE FITTINGS</u></p> <p><u>TIMBER BUILT-IN WARDROBE</u> <u>WARDROBE COMPRISING OF: 25mm thick plywood faced blockboard shutters, partitions, shelves and 4 number drawers; 16mm diameter plastic coated mild steel shoe rails, 25mm thick Formica faced blockboard, 25 x 12mm mahogany draw guide, with and including all ironmongery and accessories, painting and decorations; in accordance with Architect's detailed drawing</u></p> <p>Bedroom; Wardrobe overall size 900mm long x 600mm deep x 2900mm high</p>	NO	12		
	TOTAL CARRIED TO SUMMARY				-

.2.2/9/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.2</u> <u>ACCOMODATION BLOCK</u> <u>ELEMENT NO. 10</u> <u>ELECTRICAL INSTALLATIONS</u> <u>ALL SPECIFIED MATERIALS - GENERAL NOTES</u> To be supplied, delivered to Site, installed, connected complete and commissioned in full working condition including all the necessary fixing/mounting/terminating accessories as per Specification and Drawings, tested and commissioned to the satisfaction of the Engineer.</p> <p>i) All Main / Sub-Main Distribution Panel MCCB Boards as well as MCB Distribution Boards, must meet US/EU Certification and approved by the project manager</p> <p>ii) All power supply cables measured under this Bills of Quantities have provisional route length stated. Actual measurements will be done on site during evaluation.</p> <p>iii) All underground reticulation and distribution cables are to be supplied and installed c/w all necessary fixing / clipping / supporting / glanding and termination accessories as per general specification and type approved by the Engineer.</p> <p>iv) All indoor cables are to recessed within the cable ducts, ceiling voids, wall fabric enclosed in suitably sized PVC conduits neatly installed as per Drawings and to approval by the Engineer.</p> <p>v) All lightings fittings shall be as per Specifications and Drawings with electronic control gear compatible with 240V/50Hz. All lighting fittings are to be approved by the Engineer prior to installation.</p> <p>vi) All Fire Detection and Alarm System elements shall be as per Specifications and Drawings.</p> <p>vii) All wiring accessories shall be as per Specifications and Drawings (or otherwise specified) complete with all attachments and accessories. All samples to be approved prior to installation by the Engineer.</p> <p>viii) The entire electrical installation shall be tested for compliance in accordance to the 16th Edition of the IEE Wiring Regulations and witnessed / approved by the Engineer</p> <p>ix)</p> <p>TOTAL CARRIED TO COLLECTION</p>				-

.2.2/10/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>CONSUMER UNIT</u>				
A	100A, 6 Way Consumer unit, with 100A SP RCD mains isolator , complete with busbars 3x6A SP RCBOs, 3Nox32A SP RCBOs and complete with all accessories .The rate includes accurate labelling of all loads connected accordingly to the Consumer Unit (for Sockets and Lighting).	NO	1		
	<u>LIGHTING FITTINGS</u>				
B	Pendant/ fixed lamp holder with ceiling rose complete with screw tropical daylight bulbs, of no more than 5W	NO	12		
C	Weather proof fixed lamp holder suitable for outdoors complete with screw tropical daylight bulbs, of no more than 8W	NO	6		
	<u>WIRING ACCESSORIES:</u>				
	<u>All wiring accessories are to be brushed stainless steel metal clad. All must meet US/EU Certification and approved by the project manager.</u>				
D	6A/240V SP 1-Gang 1-Way plate switches c/w flush mounting box, and accessories.	NO	12		
E	Ditto but 1-Gang 2-Way.	NO	4		
F	13A SP 2-Gang plate switched socket outlets c/w neon indicator and flush mounting box.	NO	12		
	<u>WIRING</u>				
	<u>Lighting points:</u>				
G	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits through switches, and as per drawings.	NO	12		
	<u>Power points:</u>				
H	All wiring of all power points are to be connected complete and ready from 32A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables in ring circuit, drawn in trunking/conduits, as per drawings.	NO	12		
	<u>External Lighting points:</u>				
J	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers of DBs, using 2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits, as per drawings.	NO	8		
	TOTAL CARRIED TO COLLECTION				-

.2.2/10/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	LIGHTNING PROTECTION SCHEME				
	<u>All items are to be supplied must meet US/EU Certification and approved by the project manager. and installed complete with all the required mounting, fixing, clipping, testing, connecting accessories, connected, tested and commissioned to the satisfaction of the Electrical Engineer.</u>				
A	25mm x 3mm copper tape.	LM	30		
B	25mm x 3mm copper square test clamp.	NO	6		
C	2000mm x 15mm air rod, c/w multiple point, air terminal base, and ridge saddle.	NO	2		
D	25mm x 3mm tape clip	NO	16		
E	1200mm x 20mm solid copper earth rod, complete with driving stud and coupler, and accessories.	NO	2		
F	Approved Concrete inspection chamber.	NO	2		
G	Testing commissioning and documenting test results.	ITEM	2		
H	Production of As built drawings.	ITEM	2		
	SOLAR SYSTEM				
	Solar Panels, Charge controllers, Inverter/chargers, batteries to be supplied must all meet US/EU Certification and approved by the project manager, installed and commissioned in full working condition including all necessary accessories.				
J	320W 12V Monocrystalline solar module	NO	12		
K	Anti-theft lockable Panel frames each to house Solar modules in item above.	NO	2		
L	3000VA 24V Pure sine wave inverter	NO	1		
M	Solar charge controller 30A	NO	1		
N	12V/200AH Lithium Ion (or LiPO4)batteries to approved manufacture	NO	8		
P	Metallic Battery Bank box to house the batteries.	NO	1		
R	Testing commissioning and documenting test results.	ITEM	1		
S	Production of As built drawings.	ITEM	1		
T	Allow for wiring between solar panels, to Inverter, and to the batteries	ITEM	1		
U	Allow for 3Cx16mm, armoured copper cables from Inverter to consumer unit	m	25		
V	Allow for earthing of the installation including inverter, consumer unit, to achieve earth resistance of 1 ohm (Complete with 2No copper rods, earth pit inspection manhole, earth wire, salt/charcoal dust and all accessories	ITEM	1		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total Carried Forward From Page 3.1/10/1				-
	Total Carried Forward From Page 3.1/10/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.2/10/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.2</u>				
	<u>ACCOMODATION BLOCK</u>				
	<u>ELEMENT NO.11</u>				
	<u>MECHANICAL INSTALLATIONS</u>				
	<u>RAIN WATER HARVESTING</u>				
A	Approved 10,000L PVC tanks complete with 25mm ball valve, 25mm washout and 25mm overflow pipe.	NO	4		
B	110mm PN6 PVC pipe from Roof gutters to water tank	LM	18		
C	15mm Stop Cock as Peglar or equal and approved	NO	4		
D	Allow for the construction of tank stand base comprising of 600 x 300mm grade 25 concrete strip, 300mm thick stone wall rendered, 150mm thick top slab, with marrum in fill, measuring 3.5M diameter wide by 500mm high (above ground/floor level)	ITEM	4		
	TOTAL CARRIED TO SUMMARY				-

.2.2/11/1

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (Ugx)
	<u>BILL No .2.2</u>		
	<u>ACCOMODATION BLOCK</u>		
	<u>SUMMARY</u>		
1	SUBSTRUCTURES		-
2	R.C. FRAME		-
3	WALLING		-
4	ROOFING AND RAIN WATER DISPOSAL		-
5	DOORS		-
6	WINDOWS		-
7	EXTERNAL FINISHES		-
8	INTERNAL FINISHES		-
9	JOINERY FITTINGS		-
10	ELECTRICAL INSTALLATIONS		-
11	MECHANICAL INSTALLATIONS		-
	TOTAL BILL No .2.2 CARRIED TO BILL No 2 SUMMARY		-

2.2/S

KAEKEM RANGER POST

KITCHEN BLOCK

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO. 1</u> <u>SUBSTRUCTURES</u> <u>ALL PROVISIONAL</u> <u>The work in this element includes all works up to and including the ground floor slab</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Excavate oversite average 200mm deep to remove vegetable top soil; remove from site	SM	85		
D	Mass excavation to reduce levels not exceeding 1.5 meters deep from stripped level.	CM	42		
E	Excavate for foundation trench not exceeding 1.5 meters deep from reduced level.	CM	62		
G	Extra over excavations for excavating in rock.	CM	10		
H	Return fill and ram selected excavated material around foundations.	CM	40		
J	Load and cart away surplus excavated material from site.	CM	22		
K	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	CM	42		
L	Approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	21		
M	200mm Thick bed of hand packed stone base, well rolled and compacted.	SM	41		
N	50mm thick stone dust blinding over surfaces of hardcore	SM	41		
P	Prepare and apply Chlorpyrifos insecticide treatment or equal and approved to; surface of 50mm thick blinding, tops of foundation walling, sides and bottoms of excavations	SM	85		
	<u>CONCRETE WORK</u> <u>PLAIN CONCRETE CLASS 10; 20mm AGGREGATE :</u> <u>in</u>				
Q	50mm Thick blinding layer under strip foundations	SM	29		
	<u>VIBRATED REINFORCED CONCRETE CLASS 20;</u> <u>18mm AGGREGATE : in</u>				
R	100mm thick ground floor slab	SM	41		
	TOTAL CARRIED TO COLLECTION				-

.2.3/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED MASS CONCRETE CLASS 25; 20mm</u>				
	<u>AGGREGATE : in</u>				
A	Strip foundations	CM	7		
B	100mm Thick ramp laid to slope not exceeding 150 to horizontal, including forming 25 x 20mm deep V-groove bands	SM	6		
C	Ground beams	CM	3		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u>				
	<u>MILD STEEL ROUND BARS TO BS 4449</u>				
D	8mm Diameter bars	KG	125		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
E	12mm Diameter bars	KG	250		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
G	No. A142 Fabric Mesh reinforcement weighing 2.22 kg. per square meter fixed in slab	SM	41		
	<u>FORMWORK TO</u>				
F	Sides of beams	SM	20		
G	Sides of strip foundation	SM	18		
H	Edges of slabs 75 to 150mm high	LM	28		
	<u>DAMP PROOF COURSES</u>				
J	1000 Gauge polythene sheeting laid on blinded hardcore	SM	41		
	<u>WALLING</u>				
	<u>Solid concrete blockwork load bearing (7.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar : with and including hoop iron wall ties every alternative course : in</u>				
K	200mm Thick walls	SM	62		
	<u>TWO COATS EXTERNAL CEMENT RENDER (1:4) finished with wood float</u>				
L	12mm thick to walls	SM	40		
	<u>TWO COATS BLACK BITUMASTIC paint : on</u>				
M	Rendered walls	SM	40		
	<u>SPLASH APRON</u>				
	<u>MARRUM FILL in splash apron</u>				
N	150mm thick approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	SM	18		
	TOTAL CARRIED TO COLLECTION				-

.2.3/1/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<u>VIBRATED REINFORCED CONCRETE CLASS 20;</u> <u>20mm AGGREGATE : in</u> 100mm thick splash apron slab	SM	18		
B	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u> No. A142 Fabric Mesh reinforcement weighing .2.32 kg. per square meter fixed in slab	SM	18		
C	<u>CEMENT AND SAND (1:3) SCREEDS finished smooth</u> 25mm Thick paving	SM	18		
D	<u>Splash apron drainage channel</u> <u>300mm diameter (internal) drainage channel comprising :</u> <u>100mm Thick reinforced concrete Class 25 : sides and</u> <u>bases reinforced with A142 BRC fabric mesh</u> <u>reinforcement; finished with Colas SBS water proofing on</u> <u>cement sand screed; : including excavation, disposal and</u> <u>formwork as per Architects detailed drawing</u>	LM	14		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total brought forward from Page .2.3/1/1				-
	Total brought forward from Page .2.3/1/2				-
	Total brought forward from Page .2.3/1/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.3/1/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.3 KITCHEN BLOCK ELEMENT NO.2 R.C. FRAME CONCRETE WORK VIBRATED REINFORCED CONCRETE CLASS 25; 20mm AGGREGATE : in				
A	Ring beams	CM	2		
	STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks MILD STEEL ROUND BARS TO BS 4449				
B	8mm Diameter bars	KG	125		
	HIGH TENSILE RIBBED BARS TO BS 4449				
C	12mm Diameter bars	KG	250		
	FORMWORK TO:				
D	Sides and soffits of ring beams	SM	20		
	Structural Steelwork THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS				
	Metal work 100mm diameter x 4mm thick x 3200mm high galvanised iron class B pipe support with bottom end welded to 110 x 110 x 6mm thick plate set in and including concrete (1:3:6) base size 200 x 200 x 300mm deep and 100 x 80 x 6mm U-plate welded on top end and general painting.				
E		NO	3		
	Structural Steelwork : framed : one coat red-oxide primer;				
F	100 x 50 x 3mm RHS beam	KG	50		
	TOTAL CARRIED TO SUMMARY				-

.2.3/2/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO.2.3</u> <u>WALLING</u> <u>PRECAST CONCRETE CLASS 20; 20mm AGGREGATE</u> <u>: finished fair on all exposed surfaces including bedding</u> <u>and jointing in cement sand (1:3) mortar</u>				
A	150 x 200mm Lintels <u>BLOCK WORK</u> <u>Solid Concrete blockwork load bearing (7.0N/mm²) to BS</u> <u>5628 jointed and pointed in cement sand (1:3) mortar with</u> <u>and including hoop iron wall ties every alternative course :</u> <u>in</u>	LM	10		
B	150mm Thick walls <u>DAMP PROOF COURSE OF BITUMEN FELT TO B.S</u> <u>743 Type A with 150mm laps including cement and sand</u> <u>(1:3) levelling bed</u>	SM	130		
C	150mm Wide <u>BURNT CLAY BRICKS VENTS, 200mm thick filled with</u> <u>Kajjansi ventilation bricks or equal and approved secured,</u> <u>bedded, jointed and pointed in cement sand mortar (1:3)</u> <u>with and including insect/bat proof netting complete with</u> <u>all necessary timber framing.</u>	LM	51		
D	Vent 01 1200 wide x 200mm high	NO	4		
E	Vent 02 Size 1000 wide x 200mm high	NO	2		
F	Vent 03 Size 600mm diameter	NO	2		
G	<u>Decorative Clay Grilles</u> 230mm thick "Pompeii" grilles in coloured cement and sand mortar (1:3). including approved insect/bat proof netting or wire mesh	SM	5		
TOTAL CARRIED TO SUMMARY					-

.2.3/3/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.3</u></p> <p><u>KITCHEN BLOCK</u></p> <p><u>ELEMENT NO.4</u></p> <p><u>ROOF AND RAINWATER DISPOSAL</u></p> <p><u>Structural Steelwork</u></p> <p><u>THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS</u></p> <p><u>The following in metallic trusses with and including all, bolting, knotting, welding works, connections, hoisting and fixing approximately . 4.0 metres above existing ground level</u></p> <p><u>The following are 3 number Truss type T1;</u></p>				
A	50 x 50 x 3mm RHS Top chord	KG	132		
B	50 x 50 x 3mm RHS Bottom chord	KG	92		
C	40 x 40 x 3mm RHS Intermediate members	KG	88		
D	40 x 40 x 3mm Angles roof wind bracing	KG	25		
E	150 x 50 x 25.5 x 2mm Z - Purlins weighing 4.2.33 Kg. per meter: bolted	KG	275		
	<u>SUNDRIES</u>				
F	200 x 200 x 6mm Plate: 4 No holes for 20mm diameter J-bolts	NO	6		
G	16mm Diameter J bolt; 250mm Long; head, nut and washers	NO	24		
	<u>ROOF COVERING</u>				
	<u>26 Gauge pre-painted IT4 roofing sheets : fixed to Z-purlins with J-bolts : in</u>				
H	Sheet laid to attain a slope of 22.5 degrees from horizontal.	SM	65		
J	300mm Wide ridge flashing	LM	8		
	<u>MILD STEEL, GRADE GJ</u>				
M	230 x 2mm thick plate fascia; curved to form groove to the edges welded onto steel rafters; one coat red oxide primer	LM	44		
	TOTAL CARRIED TO COLLECTION				-

.2.3/4/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>RAIN WATER DISPOSAL</u>				
	<u>PVC Key terrain fixed in accordance with manufacturer's instructions</u>				
A	Terrain water system or other equal and approved 250 wide x 150mm deep x 3mm thick U-shaped PVC rainwater gutter fixed fascia board with holding clumps secured with approved bolts	LM	16		
B	110mm diameter PVC down pipe	LM	8		
C	Extra over gutter for outlet to suit 110mm diameter pipe.	NO	2		
D	Extra over gutter for valley hoppers	NO	2		
E	Ditto for bends.	NO	2		
F	Extra over for bends.	NO	2		
G	Extra over for horse shoe.	NO	2		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total carried forward from Page .2.3/4/1				-
	Total carried forward from Page .2.3/4/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.3/4/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO. 5</u> <u>DOORS</u> <u>METALLIC WORK</u> <u>Purpose made steel casement Doors manufactured from standard casement 2.0mm thick sections : manufacture, assemble and deliver to site: supply and fix all approved UNION or equal ironmongery : with and including 2mm thick impact plates, 20 x 20 x 2mm SHS burglar proof grils, and door frames fixing drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</u>				
A	Door D1 overall size 1000 x 2100mm high (overall) as per Architect's detailed drawing	NO	2		
	<u>Glass and Glazing</u>				
B	6mm thick clear sheet glass to metal doors with putty <u>PREPARE SURFACE AND APPLY THREE COATS,</u> <u>Gloss oil paint in accordance with manufacturer's instructions : on metal work : to</u>	SM	1		
C	Metallic surface	SM	9		
	TOTAL CARRIED TO SUMMARY				-

.2.3/5/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO. 6</u> <u>WINDOWS</u> <u>METAL WORK</u> <u>PURPOSE MADE STEEL CASEMENT WINDOWS</u> <u>manufactured from standard window casement 2.5mm thick sections : manufacture, assemble and deliver to site: supply and fix sliding aluminium insect mesh and shutters and approved mesh, ironmongery comprising approved hinges, pivoting mechanisms, stays, fasteners to opening lights: provide permanent vents: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery, as per Architect's detailed drawing.</u> <u>The bidder is advised to study the architectural drawings carefully and consult the architect in case of doubt as no claim will be entertained on ground of inadequacy of description of any item.</u>				
A	Glazed louvered window W01 Size 1200 x 1200mm high (overall) <u>PURPOSE MADE STANDARD Steel burglar proofing made from 20 x 20 x 2mm SHS and 40 x 3mm flats : one coat red oxide primer as per Architect's detailed drawing</u>	NO	4		
B	Window W01 Size 1200 x 1200mm high (overall) <u>Glass and Glazing</u>	NO	4		
C	5mm thick clear sheet glass to metal windows with putty <u>PREPARE SURFACE AND APPLY ETCHING PRIMER; apply one coat primer, one undercoat and two Gloss finishing coats; on metal work : to</u>	SM	6		
D	Metallic Windows	SM	12		
E	Burglar proofing	SM	12		
	TOTAL CARRIED TO SUMMARY				-

.2/6/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO.7</u> <u>EXTERNAL FINISHES</u> <u>WALL FINISHES</u> <u>CEMENT AND WASHED SAND (1:3) RENDER</u> <u>trowelled smooth</u>				
A	12mm Thick to walls.	SM	105		
	<u>PAINTING AND DECORATING</u> <u>PREPARE AND APPLY THREE COATS first grade</u> <u>weatherguard emulsion paint : externally; on</u>				
B	Rendered surfaces	SM	105		
	<u>PIGMENTED TYROLEAN, CEMENT AND WASHED</u> <u>SAND sprayed onto;</u>				
C	10mm thick three layer work to concrete surfaces and including 13mm cement and sand (1:3) base	SM	60		
	TOTAL CARRIED TO SUMMARY				-

.2.3/7/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.3</u>				
	<u>KITCHEN BLOCK</u>				
	<u>ELEMENT NO.8</u>				
	<u>INTERNAL FINISHES</u>				
	<u>FLOOR FINISHES</u>				
	<u>CEMENT AND SAND (1:4) SCREEDS finished to the floor</u>				
A	45mm thick finished smooth	SM	38		
B	20 x 120mm skirting rounded edge top	LM	68		
	<u>WALL FINISHES</u>				
	<u>INTERNAL LIME PLASTER First coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth</u>				
C	18mm Thick two coat work to walls	SM	140		
	<u>PREPARE AND APPLY ONE MIST COAT AND THREE COATS silk vinyl emulsion paint internally on:</u>				
D	Plastered surfaces	SM	140		
	<u>CEILING FINISHES</u>				
	<u>Expanded Metal Lath Plastered ceiling comprising, expanded metal lath weighing 2.5kg/m2, staple to 100 x 50mm joist, 50 x 50mm branderings softwood framing(m.s) at 600mm centres both ways; metal lath nailed onto framework; 15mm cement sand (1:4) pricking course including 12mm lime plaster</u>				
E	Ceiling	SM	38		
F	Extra over 50 mm High x 10 mm wide cornice to Architects details	LM	68		
G	Extra over for 600 x 600mm trap door	NO	2		
	<u>Internal lime plaster first coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth</u>				
	15mm thick to metal lathe ceiling	SM	38		
	<u>PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint : on</u>				
H	Ceiling soffits	SM	38		
J	Ditto; 75mm thick cornice	LM	68		
	TOTAL CARRIED TO SUMMARY				-

.2.3/8/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO. 9</u> <u>JOINERY FITTINGS</u> <u>RATES FOR ALL JOINERY WORKS MUST INCLUDE ALL ACCESSORIES AND FITTINGS; PAINTING AND DECORATIONS; IRONMONGERY; AS PER ARCHITECT'S DETAILED DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS REQUIRED ON THE FITTINGS</u></p> <p><u>WORKTOPS</u> <u>900mm high worktop comprising of 75mm thick suspended approved polished reinforced concrete class 30 slab, reinforced with BRC A142 mesh, 80mm thick concrete class 20 benching with 30mm thick cement sand Screed (1:3) smooth finish, 150mm thick solid concrete block support plastered walls ; including painting and decorations; low level cabinet comprising 25mm thick lipped blockboard; 100 x 50mm timber base; 25mm thick blockboard shelving on 25 x 25 hardwood framing; 20mm thick 25mm thick blockboard shutters, linings and drawers ; including all ironmongery, painting and decorations; all to Architect's general details</u></p>				
A	<p>Worktop overall size 4000mm long x 600mm wide</p> <p><u>HIGH LEVEL CABINETS</u> <u>Supply and Install high level approved timber cabinets and shelving size 300 deep comprising of 25mm Formica faced blockboard doors (side opening) with hard wood lining, 25 x 50mm hard wood frames, 25mm blockboard sides and shelves with hard wood lining, approved stainless steel hinges, approved continuous anodized aluminium pull handle including all joinery works, all necessary accessories, applying three coats of varnish to timber surfaces as per architectural drawing and detail.</u></p>	NO.	2		
B	<p>Cabinet overall size 3600mm long x 450mm hide</p>	NO.	2		
	TOTAL CARRIED TO COLLECTION				-

.2.3/9/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<u>Fire place</u> 150mm thick approved fire clay brickwork jointed with cement sand mortar (1:3) to chimney breast.	SM	8		
B	50 mm thick precast concrete copping size 1250 x 1250mm reinforced as necessary and finished fair on all exposed sides including hoisting and fixing in position.	NO.	2		
C	<u>In situ concrete grade 25 / 20mm : vibrated, reinforced as described</u> 75mm thick slopping slabs reinforced with BRC mesh fabric reinforcement reference A142 weighing 2.22 kg/m2.	SM	7		
D	<u>FORMWORK TO:</u> To sides and soffits of sloping slabs	SM	5		
E	<u>ENERGY SAVING WOOD FIRED STOVES</u> Wood Energy Saving firewood rocket stove made of selected fireclay brick body structure and qualitile(fired clay)/terrazo top with stove frame made of assembled angle sections, saucepan stabilizer/top ring of stainless steel 2 Fm x 3mm btm, grating,ash scoop,complete with adequate heat insulation and chimney of galvanised steel G.24;of capacity 20 litres, as supplied by approved supplier or equal approved.	NO	4		
F	Ditto but 15 litres	NO	4		
G	Ditto but 15 litres for charcoal saving rocket stoves	NO	4		
H	<u>SEAT</u> <u>450mm Wide x 500mm high Bench comprising of 75mm thick suspended approved polished reinforced concrete class 30 slab reinforced with BRC A142 mesh and finished with 25mm thick polished terrazzo paving as described before to the top and edges; 150mm thick solid concrete block support walls; lime plaster to wall and soffits of slab; 250 x 30mm thick timber back rest, secured to the wall with 50 x 120 x 75 wood block paced at 1200mm centres, bolted to the wall, including painting and decorations; all to Architect's general details</u> Waiting bench; overall size 1800mm long	NO	4		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				-
	Total carried forward from Page .2.3/9/1				-
	Total carried forward from Page .2.3/9/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.3/9/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO. 10</u> <u>ELECTRICAL INSTALLATIONS</u> <u>ALL SPECIFIED MATERIALS - GENERAL NOTES</u> To be supplied, delivered to Site, installed, connected complete and commissioned in full working condition including all the necessary fixing/mounting/terminating accessories as per Specification and Drawings, tested and commissioned to the satisfaction of the Engineer.</p> <p>i) To be supplied, delivered to Site, installed, connected complete and commissioned in full working condition including all the necessary fixing/mounting/terminating accessories as per Specification and Drawings, tested and commissioned to the satisfaction of the Engineer.</p> <p>ii) All Main / Sub-Main Distribution Panel MCCB Boards as well as MCB Distribution Boards, must meet US/EU Certification and approved by the project manager</p> <p>iii) All power supply cables measured under this Bills of Quantities have provisional route length stated. Actual measurements will be done on site during evaluation.</p> <p>iv) All underground reticulation and distribution cables are to be supplied and installed c/w all necessary fixing / clipping / supporting / glanding and termination accessories as per general specification and type approved by the Engineer.</p> <p>v) All indoor cables are to recessed within the cable ducts, ceiling voids, wall fabric enclosed in suitably sized PVC conduits neatly installed as per Drawings and to approval by the Engineer.</p> <p>vi) All lightings fittings shall be as per Specifications and Drawings with electronic control gear compatible with 240V/50Hz. All lighting fittings are to be approved by the Engineer prior to installation.</p> <p>vii) All Fire Detection and Alarm System elements shall be as per Specifications and Drawings.</p> <p>viii) All wiring accessories shall be as per Specifications and Drawings (or otherwise specified) complete with all attachments and accessories. All samples to be approved prior to installation by the Engineer.</p> <p>ix) The entire electrical installation shall be tested for compliance in accordance to the 16th Edition of the IEE Wiring Regulations and witnessed / approved by the Engineer</p> <p>TOTAL CARRIED TO COLLECTION</p>				-

.2.3/10/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>CONSUMER UNIT</u>				
A	100A, 6 Way Consumer unit, with 100A SP RCD mains isolator , complete with busbars 3x6A SP RCBOs, 3Nox32A SP RCBOs and complete with all accessories .The rate includes accurate labelling of all loads connected accordingly to the Consumer Unit (for Sockets and Lighting).	NO	1		
	<u>LIGHTING FITTINGS</u>				
B	Pendant/fixed lamp holder with ceiling rose complete with screw tropical daylight bulbs, of no more than 5W	NO	2		
C	Weather proof fixed lamp holder suitable for outdoors complete with screw tropical daylight bulbs, of no more than 8W	NO	4		
	<u>WIRING ACCESSORIES:</u>				
	<u>All wiring accessories are to be brushed stainless steel metal clad. All must meet US/EU Certification and approved by the project manager.</u>				
D	6A/240V SP 1-Gang 1-Way plate switches c/w flush mounting box, and accessories.	NO	3		
	<u>WIRING</u>				
	<u>Lighting points:</u>				
E	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits through switches, and as per drawings.	NO	2		
	<u>External Lighting points:</u>				
F	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers of DBs, using 2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits, as per drawings.	NO	4		
	TOTAL CARRIED TO COLLECTION				-

.23/10/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>LIGHTNING PROTECTION SCHEME</u>				
	<u>All items are to be supplied must meet US/EU Certification and approved by the project manager. As described before</u>				
A	25mm x 3mm copper tape.	LM	15		
B	25mm x 3mm copper square test clamp.	NO	2		
C	2000mm x 15mm air rod, c/w multiple point, air terminal base, and ridge saddle.	NO	1		
D	25mm x 3mm tape clip	NO	5		
E	1200mm x 20mm solid copper earth rod, complete with driving stud and coupler, and accessories.	NO	2		
F	Approved Concrete inspection chamber.	NO	2		
G	Testing commissioning and documenting test results.	ITEM	1		
H	Production of As built drawings.	ITEM	1		
	<u>SOLAR SYSTEM</u>				
	Solar Panels, Charge controllers, Inverter/chargers, batteries to be supplied must all meet US/EU Certification and approved by the project manager, installed and commissioned in full				
J	320W 12V Monocrystalline solar module	NO	6		
K	Anti-theft lockable Panel frames each to house Solar modules in item above.	NO	1		
L	1500VA 24V Pure sine wave inverter	NO	1		
M	Solar charge controller 30A	NO	1		
N	12V/200AH Lithium Ion (or LiPO4)batteries to approved manufacture	NO	4		
P	Metallic Battery Bank box to house the batteries.	NO	1		
R	Testing commissioning and documenting test results.	ITEM	1		
S	Production of As built drawings.	ITEM	1		
T	Allow for wiring between solar panels, to Inverter, and to the batteries	ITEM	1		
U	Allow for 3Cx16mm, armoured copper cables from Inverter to consumer unit	m	25		
V	Allow for earthing of the installation including inverter, consumer unit, to achieve earth resistance of 1 ohm (Complete with 2No copper rods, earth pit inspection manhole, earth wire, salt/charcoal dust and all accessories	ITEM	1		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total Carried Forward From Page 3/10/1				-
	Total Carried Forward From Page 3/10/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.3/10/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.3</u> <u>KITCHEN BLOCK</u> <u>ELEMENT NO.11</u> <u>MECHANICAL INSTALLATIONS</u> <u>SANITARY FITTINGS</u> <u>INTERNAL WATER SUPPLY AND DISTRIBUTION</u></p> <p><u>The Contractor shall supply, deliver, install, test and commission to the satisfaction of the Engineer the following including builders works:-</u> <u>The Tenderers must allow in their prices for all couplings, connectors as required in the running lengths of pipes</u></p> <p><u>INTERNAL DRAINAGE</u> <u>Supply and Install the following including clamps/ brackets for supporting pipes, builders works which involves making good to any openings made in floor slabs and chiselling of walls</u> <u>The pipes to be Polypropylene Upvc pipes as per drawings, Complete with all accessories including all associated builders works.</u> <u>uPVC Pipes PN6</u></p> <p>A 40mm Complete with Tees, Bends, Reducers, Access plugs, necessary fittings and accessories. LM 15</p> <p>B 50mm Complete with Tees, Bends, Reducers, Access plugs, necessary fittings and accessories. LM 16</p> <p>C 110 x 50mm PVC Floor trap NO 2</p> <p>D Stainless steel grating 150x 150 NO 2</p> <p><u>External Drainage</u></p> <p>E 110mm PVC heavy gauge pipework buried in the ground to a fall of 1:60 complete with excavations, bedding, backfilling and all accessories. M 40</p> <p>F Gully Trap (GT) complete with PVC trap, masonry construction 300x300mm, with steel cover and all accessories. NO 2</p> <p>G Manhole 450 x 600mm in masonry brickwork, rendered smooth inside complete with benching, heavy duty manhole cover made out of concrete and angles and all accessories. NO 2</p> <p>H Soak Pit Size approx. 2500mm on top tapering to 1500mm and depth of 4000mm complete with hardcore and all accessories. NO 1</p>				
	TOTAL CARRIED TO COLLECTION				-

.23/11/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>Supply and install the following sanitary fittings that must all meet the US/EU Certification and approved by the project manager including installation of the fittings and all necessary accessories</u>				
	<u>Kitchen Sink</u>				
A	Single bowl Single drain stainless steel kitchen sink made out of 18SWG stainless steel and complete with a 15mm(1/2") Mixer Tap as Logics Kitchen Monoblock, 40mm chrome plated trap with stopper and chrome plated chain, and flexible hoses as per detailed drawing	NO	2		
	<u>FIRE FIGHTING</u>				
B	9kg Portable dry powder fire extinguisher conforming to BS5423 wall mounted type complete with support bracket and appropriate charge of powder and carbon dioxide cartridge	NO	2		
	<u>RAIN WATER HARVESTING</u>				
C	Approved 10,000L PVC tanks complete with 25mm ball valve, 25mm washout and 25mm overflow pipe.	NO	2		
D	110mm PN6 PVC pipe from Roof gutters to water tank	LM	9		
E	15mm Stop Cock as Peglar or equal and approved	NO	2		
F	Allow for the construction of tank stand base comprising of 600 x 300mm grade 25 concrete strip, 300mm thick stone wall rendered, 150mm thick top slab, with marrum in fill, measuring 3.5M diameter wide by 500mm high (above ground/floor level)	ITEM	2		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total carried forward from Page .2.3/11/1				-
	Total carried forward from Page .2.3/11/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.3/11/2

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (Ugx)
	<u>BILL No. 2.3</u>		
	<u>KITCHEN BLOCK</u>		
	<u>SUMMARY</u>		
1	SUBSTRUCTURES		-
2	R.C. FRAME		-
3	WALLING		-
4	ROOFING AND RAIN WATER DISPOSAL		-
5	DOORS		-
6	WINDOWS		-
7	EXTERNAL FINISHES		-
8	INTERNAL FINISHES		-
9	JOINERY FITTINGS		-
10	ELECTRICAL INSTALLATIONS		-
11	MECHANICAL INSTALLATIONS		-
	TOTAL BILL No .2.3 CARRIED TO BILL No 3		
	SUMMARY		-

KAEKEM RANGER POST

MEETING ROOM

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO. 1</u> <u>SUBSTRUCTURES</u> <u>ALL PROVISIONAL</u> <u>The work in this element includes all works up to and including the ground floor slab</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Excavate oversite average 200mm deep to remove vegetable top soil; remove from site	SM	90		
D	Mass excavation to reduce levels not exceeding 1.5 meters deep from stripped level.	CM	45		
E	Excavate for column bases not exceeding 1.5 meters deep from reduced level.	CM	36		
F	Excavate for foundation trench not exceeding 1.5 meters deep from reduced level.	CM	18		
G	Extra over excavations for excavating in rock.	CM	5		
H	Return fill and ram selected excavated material around foundations.	CM	24		
J	Load and cart away surplus excavated material from site.	CM	12		
K	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	CM	45		
L	Approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	20		
M	200mm Thick bed of hand packed stone base, well rolled and compacted.	SM	40		
N	50mm thick stone dust blinding over surfaces of hardcore	SM	40		
P	Prepare and apply Chlorpyrifos insecticide treatment or equal and approved to; surface of 50mm thick blinding, tops of foundation walling, sides and bottoms of excavations	SM	90		
	<u>CONCRETE WORK</u> <u>PLAIN CONCRETE CLASS 10; 20mm AGGREGATE : in</u>				
Q	100mm Thick blinding layer under masonry	SM	18		
	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 20mm AGGREGATE : in</u>				
R	100mm thick ground floor slab	SM	40		
	TOTAL CARRIED TO COLLECTION				-

.24/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED MASS CONCRETE CLASS 25; 20mm AGGREGATE : in</u>				
A	Ground beam	CM	5		
B	Column bases	CM	3		
C	Columns	CM	1		
D	100mm Thick ramp laid to slope not exceeding 150 to horizontal, including forming 25 x 20mm deep V-groove bands	SM	6		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u>				
	<u>MILD STEEL ROUND BARS TO BS 4449</u>				
E	8mm Diameter bars	KG	250		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
F	12mm Diameter bars	KG	580		
G	16mm Diameter bars	KG	370		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
H	No. A142 Fabric Mesh reinforcement weighing 2.22 kg. per square meter fixed in slab	SM	40		
	<u>FORMWORK TO</u>				
J	Sides of ground beams	SM	28		
K	Sides of column bases	SM	11		
L	Sides of columns	SM	12		
M	Sides of strip foundation	SM	12		
N	Edges of slabs 75 to 150mm high	LM	25		
	<u>DAMP PROOF COURSES</u>				
P	1000 Gauge polythene sheeting laid on blinded hardcore	SM	40		
	<u>TWO COATS EXTERNAL CEMENT RENDER (1:4) finished with wood float</u>				
Q	12mm thick to walls	SM	36		
	<u>TWO COATS BLACK BITUMASTIC paint : on</u>				
R	Rendered walls	SM	36		
	<u>SPLASH APRON</u>				
	<u>MARRUM FILL in splash apron</u>				
S	150mm thick approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	SM	16		
	TOTAL CARRIED TO SUMMARY				-

.24/1/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 20mm AGGREGATE : in</u>				
A	100mm thick splash apron slab	SM	16		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
B	No. A142 Fabric Mesh reinforcement weighing .2.42 kg. per square meter fixed in slab	SM	16		
	<u>CEMENT AND SAND (1:3) SCREEDS finished smooth</u>				
C	25mm Thick paving	SM	16		
	<u>Splash apron drainage channel</u>				
	<u>300mm diameter (internal) drainage channel comprising : 100mm Thick reinforced concrete Class 25 : sides and bases reinforced with A142 BRC fabric mesh reinforcement; finished with Colas SBS water proofing on cement sand screed; : including excavation, disposal and formwork as per Architects detailed drawing</u>				
D	500 x 300mm deep(average depth) channel	LM	20		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total brought forward from Page .2.4/1/1				-
	Total brought forward from Page .2.4/1/2				-
	Total brought forward from Page .2.4/1/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.4/1/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO.2</u> <u>TMBER FRAME</u> <u>SAWN PRESSURE IMPREGNATED APPROVED PRIME HARDWOOD</u> <u>The following in timber posts and girders with and including all nailing, bolting, knotting, joinery works, connections, hoisting and fixing approximately . 3.0 metres above existing ground level</u>				
	<u>TIMBER POST</u> A 200mm diameter x 3000mm high Vertical Posts	NO	6		
	<u>GIRDER BEAMS</u> B 100mm diameter timber pole in horizontal members C Ditto in diagonal member D Ditto in vertical member	LM LM LM	48 24 18		
	<u>PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on wood work : to</u> E General surfaces over 150mm but not exceeding 225mm diameter F Ditto over 75mm but not exceeding 150mm diameter	LM LM	18 45		
	<u>Structural Steelwork : framed : one coat red-oxide primer and three coat of approved oil base paint;</u> <u>SUNDRIES</u> G 250 x 80 x 12mm Plate: 2 No holes welded to base plate H 200 x 200 x 5mm base Plate: 4 No holes J Anchor bolts 25 mm U bolt; 250mm Long; head, nut and washers cast in concrete base K M16 bolts, 16 mm with; 250mm long head, nut and washers securing or bolted in timber column	NO NO NO NO	12 12 24 12		
	TOTAL CARRIED TO SUMMARY				-

.2.4/2/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO.3</u> <u>WALLING</u> <u>Stone masonry load bearing (7.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar : with and including hoop iron wall ties every alternative course : in</u>				
A	400mm Thick walls <u>Solid Concrete blockwork load bearing (7.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar with and including hoop iron wall ties every alternative course : in</u>	SM	24		
B	150mm Thick walls <u>Selected approved treated bamboo reeds maximum diameter 25mm secured and nailed to timber struts(ms) with and including tying fibre, painting and decorations; all to Architect's general details</u>	SM	14		
C	Reed partitions <u>DAMP PROOF COURSE OF BITUMEN FELT TO B.S 743 Type A with 150mm laps including cement and sand (1:3) levelling bed</u>	SM	12		
D	150mm Wide	LM	8		
E	400mm Wide <u>PRECAST CONCRETE CLASS 20; 20mm AGGREGATE : finished fair on all exposed surfaces including bedding and jointing in cement sand (1:3) mortar including throating</u>	LM	24		
F	45 x 360mm wide coping	LM	24		
TOTAL CARRIED TO SUMMARY					-

.2.4/3/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u>				
	<u>MEETING ROOM</u>				
	<u>ELEMENT NO.2.4</u>				
	<u>ROOF AND RAINWATER DISPOSAL</u>				
	<u>SAWN PRESSURE IMPREGNATED APPROVED PRIME HARDWOOD</u>				
	<u>The following in timber members with and including all nailing, bolting, knotting, joinery works, connections, hoisting and fixing approximately . 4.0 metres above existing ground level</u>				
B	50 x 200mm Main hexagonal central bracing	LM	4		
B	50 x 200mm Main rafters	LM	52		
B	50 x 150mm Secondary rafters	LM	62		
C	50 x 75mm Purlin	LM	84		
E	25 x 200mm Sawn timber fascia board	LM	28		
	<u>Wall Plate secured to timber girder at 250mm centres with hoop iron ties and including nailing and all joinery works</u>				
J	100 x 75 Wall Plate	LM	24		
	<u>ROOF COVERING</u>				
	<u>26 Gauge pre-painted IT4 roofing sheets : fixed to Z-purlins with J-bolts : in</u>				
H	Sheet laid to attain a slope of 22.5 degrees from horizontal.	SM	62		
J	300mm Wide ridge flashing	LM	30		
	<u>Painting to Fascia Board</u>				
K	Prepare and apply three coats of gloss oil paint to wood surfaces over 200 but not exceeding 300mm girth	LM	28		
	<u>RAIN WATER DISPOSAL</u>				
	<u>PVC Key terrain fixed in accordance with manufacturer's instructions</u>				
A	Terrain water system or other equal and approved 250 wide x 150mm deep x 3mm thick U-shaped PVC rainwater gutter fixed fascia board with holding clumps secured with approved bolts	LM	28		
B	110mm diameter PVC down pipe	LM	8		
C	Extra over gutter for outlet to suit 110mm diameter pipe.	NO	2		
D	Extra over gutter for valley hoppers	NO	2		
E	Ditto for bends.	NO	2		
F	Extra over for bends.	NO	2		
G	Extra over for horse shoe.	NO	2		
	TOTAL CARRIED TO SUMMARY				-

.2.4/4/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO. 5</u> <u>DOORS</u> <u>TIMBER DOORS</u> <u>45mm THICK SOLID CORED FLUSH DOORS faced both sides with 6mm plywood veneer: to Architect's approval with hardwood lipping all round; all to Architect</u>				
A	Double leaf swing door D1PV Size 900 x 1000mm high comprising 2No. shutters size 450 x 1000mm high; as per architect's detailed drawing <u>METAL WORK</u> <u>PURPOSE MADE DOOR FRAMES AS MANUFACTURED BY ROOFINGS OR EQUAL AND APPROVED: Standard Steel door section complete with fixing accessories; one coat red oxide primer; all to Architect's detailed drawing</u>	NO	2		
B	210mm girth rebated to profile x 2mm thick steel frame <u>PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on metal work : to</u>	LM	6		
C	Surfaces 200 - 300mm girth <u>PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on wood work : to</u>	LM	6		
D	General surfaces <u>SUPPLY AND FIX the following ironmongery : locks and furniture where applicable are to be equal to those manufactured by "HAFELE" and approved by the Architect</u> <u>Set 1 (D2)</u>	SM	5		
E	Stainless steel startec adjustable double action hinges Size 150mm long x2.00mm thick	Prs.	2		
F	Push Plates; Cat No. 987.11.300	NO	2		
G	25mm rubber door stop plugged to floor; Star tec ; Cat No. 937.11.711	NO	2		
TOTAL CARRIED TO SUMMARY					-

.2.4/5/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO.6</u> <u>EXTERNAL FINISHES</u> <u>WALL FINISHES</u> <u>CEMENT AND WASHED SAND (1:3) RENDER trowelled smooth</u> 12mm Thick to walls.	SM	56		
B	<u>PAINTING AND DECORATING</u> <u>PREPARE AND APPLY THREE COATS first grade weatherguard emulsion</u> <u>paint : externally; on</u> Rendered surfaces	SM	56		
	TOTAL CARRIED TO SUMMARY				-

.24/6/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u>				
	<u>MEETING ROOM</u>				
	<u>ELEMENT NO.7</u>				
	<u>INTERNAL FINISHES</u>				
	<u>FLOOR FINISHES</u>				
	<u>CEMENT AND SAND (1:4) SCREEDS finished to the floor</u>				
A	45mm thick finished smooth	SM	38		
B	20 x 120mm skirting rounded edge top	LM	24		
	<u>WALL FINISHES</u>				
	<u>INTERNAL LIME PLASTER First coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth</u>				
C	18mm Thick two coat work to walls	SM	56		
	<u>PREPARE AND APPLY ONE MIST COAT AND THREE COATS silk vinyl emulsion paint internally on:</u>				
D	Plastered surfaces	SM	56		
	<u>CEILING FINISHES</u>				
	<u>Expanded Metal Lath Plastered ceiling comprising, expanded metal lath weighing 2.5kg/m2, staple to 100 x 50mm joist, 50 x 50mm branderings softwood framing(m.s) at 600mm centres both ways; metal lath nailed onto framework; 15mm cement sand (1:4) pricking course including 12mm lime plaster</u>				
E	Ceiling inclined at 30 degrees from the horizontal	SM	44		
F	Extra over 50 mm High x 10 mm wide cornice to Architects details	LM	24		
G	Extra over for 600 x 600mm trap door	NO	1		
	<u>Internal lime plaster first coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth</u>				
	15mm thick to metal lathe ceiling inclined at 30 degrees from the horizontal	SM	44		
	<u>PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint : on</u>				
H	Ceiling soffits	SM	44		
J	Ditto; 120mm thick cornice	LM	24		
	TOTAL CARRIED TO SUMMARY				-

.2.4/7/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<p><u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO. 8</u> <u>JOINERY FITTINGS</u> <u>RATES FOR ALL JOINERY WORKS MUST INCLUDE ALL ACCESSORIES AND FITTINGS; PAINTING AND DECORATIONS; IRONMONGERY; AS PER ARCHITECT'S DETAILED DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS REQUIRED ON THE FITTINGS</u> <u>HIGH LEVEL CABINETS</u> <u>Supply and Install high level approved timber cabinets and shelving size 300 deep comprising of 25mm Formica faced blockboard doors (side opening) with hard wood lining, 25 x 50mm hard wood frames, 25mm blockboard sides and shelves with hard wood lining, approved stainless steel hinges, approved continuous anodized aluminium pull handle including all joinery works, all necessary accessories, applying three coats of varnish to timber surfaces as per architectural drawing and detail.</u></p> <p>Cabinet overall size 7800mm long x 450mm hide</p>	NO.	1		
	TOTAL CARRIED TO SUMMARY				-

.2.4/8/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO. 9</u> <u>ELECTRICAL INSTALLATIONS</u> <u>ALL SPECIFIED MATERIALS - GENERAL NOTES</u></p> <p>To be supplied, delivered to Site, installed, connected complete and commissioned in full working condition including all the necessary fixing/mounting/terminating accessories as per Specification and Drawings, tested and commissioned to the satisfaction of the Engineer.</p> <p>i) All Main / Sub-Main Distribution Panel MCCB Boards as well as MCB Distribution Boards, must meet US/EU Certification and approved by the project manager</p> <p>ii) All power supply cables measured under this Bills of Quantities have provisional route length stated. Actual measurements will be done on site during evaluation.</p> <p>iii) All underground reticulation and distribution cables are to be supplied and installed c/w all necessary fixing / clipping / supporting / glanding and termination accessories as per general specification and type approved by the Engineer.</p> <p>iv) All indoor cables are to recessed within the cable ducts, ceiling voids, wall fabric enclosed in suitably sized PVC conduits neatly installed as per Drawings and to approval by the Engineer.</p> <p>v) All lightings fittings shall be as per Specifications and Drawings with electronic control gear compatible with 240V/50Hz. All lighting fittings are to be approved by the Engineer prior to installation.</p> <p>vi) All Fire Detection and Alarm System elements shall be as per Specifications and Drawings.</p> <p>vii) All wiring accessories shall be as per Specifications and Drawings (or otherwise specified) complete with all attachments and accessories. All samples to be approved prior to installation by the Engineer.</p> <p>viii) The entire electrical installation shall be tested for compliance in accordance to the 16th Edition of the IEE Wiring Regulations and witnessed / approved by the Engineer</p> <p>ix)</p> <p>TOTAL CARRIED TO COLLECTION</p>				-

.2.4/9/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	CONSUMER UNIT				
A	100A, 6 Way Consumer unit, with 100A SP RCD mains isolator , complete with busbars 3x6A SP RCBOs, 3Nox32A SP RCBOs and complete with all accessories .The rate includes accurate labelling of all loads connected accordingly to the Consumer Unit (for Sockets and Lighting).	NO	1		
	LIGHTING FITTINGS				
B	Pendant/fixed lamp holder with ceiling rose complete with screw tropical daylight bulbs, of no more than 5W	NO	5		
C	Weather proof fixed lamp holder suitable for outdoors complete with screw tropical daylight bulbs, of no more than 8W	NO	1		
	WIRING ACCESSORIES:				
	<u>All wiring accessories are to be brushed stainless steel metal clad. All must meet US/EU Certification and approved by the project manager.</u>				
D	6A/240V SP 1-Gang 1-Way plate switches c/w flush mounting box, and accessories.	NO	3		
E	13A SP 2-Gang plate switched socket outlets c/w neon indicator and flush mounting box.	NO	3		
	WIRING				
	Lighting points:				
F	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits through switches, and as per drawings.	NO	5		
	Power points:				
G	All wiring of all power points are to be connected complete and ready from 32A SP miniature circuit breakers, using 3x2.5mm sq. PVC-Insulated single core copper cables in ring circuit, drawn in trunking/conduits, as per drawings.	NO	3		
	External Lighting points:				
H	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers of DBs, using 2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits, as per drawings.	NO	1		
	TOTAL CARRIED TO COLLECTION				-

.24/9/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>LIGHTNING PROTECTION SCHEME</u>				
	<u>All items are to be supplied must meet US/EU Certification and approved by the project manager. and installed complete with all the required mounting, fixing, clipping, testing, connecting accessories, connected, tested and commissioned to the satisfaction of the Electrical Engineer.</u>				
A	25mm x 3mm copper tape.	LM	15		
B	25mm x 3mm copper square test clamp.	NO	2		
C	2000mm x 15mm air rod, c/w multiple point, air terminal base, and ridge saddle.	NO	1		
D	25mm x 3mm tape clip	NO	5		
E	1200mm x 20mm solid copper earth rod, complete with driving stud and coupler, and accessories.	NO	2		
F	Approved Concrete inspection chamber.	NO	2		
G	Testing commissioning and documenting test results.	ITEM	1		
H	Production of As built drawings.	ITEM	1		
	<u>SOLAR SYSTEM</u>				
	Solar Panels, Charge controllers, Inverter/chargers, batteries to be supplied must all meet US/EU Certification and approved by the project manager, installed and commissioned in full working condition including all necessary accessories.				
J	320W 12V Monocrystalline solar module	NO	3		
K	Anti-theft lockable Panel frames each to house Solar modules in item above.	NO	1		
L	1000VA 24V Pure sine wave inverter	NO	1		
M	Solar charge controller 30A	NO	1		
N	12V/200AH Lithium Ion (or LiPO4)batteries to approved manufacture	NO	2		
P	Metallic Battery Bank box to house the batteries.	NO	1		
R	Testing commissioning and documenting test results.	ITEM	1		
S	Production of As built drawings.	ITEM	1		
T	Allow for wiring between solar panels, to Inverter, and to the batteries	ITEM	1		
U	Allow for 3Cx16mm, armoured copper cables from Inverter to consumer unit	m	25		
V	Allow for earthing of the installation including inverter, consumer unit, to achieve earth resistance of 1 ohm (Complete with 2No copper rods, earth pit inspection manhole, earth wire, salt/charcoal dust and all accessories	ITEM	1		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total Carried Forward From Page 2.4/9/2				-
	Total Carried Forward From Page 2.4/9/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.4/9/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.4</u> <u>MEETING ROOM</u> <u>ELEMENT NO.10</u> <u>MECHANICAL INSTALLATIONS</u> <u>RAIN WATER HARVESTING</u>				
A	Approved 10,000L PVC tanks complete with 25mm ball valve, 25mm washout and 25mm overflow pipe.	NO	2		
B	110mm PN6 PVC pipe from Roof gutters to water tank	LM	9		
C	15mm Stop Cock as Peglar or equal and approved	NO	2		
D	Allow for the construction of tank stand base comprising of 600 x 300mm grade 25 concrete strip, 300mm thick stone wall rendered, 150mm thick top slab, with marrum in fill, measuring 3.5M diameter wide by 500mm high (above ground/floor level)	ITEM	2		
	TOTAL CARRIED TO SUMMARY				-

.24/10/1

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (Ugx)
	<u>BILL No. 2.4</u>		
	<u>MEETING ROOM</u>		
	<u>SUMMARY</u>		
1	SUBSTRUCTURES		-
2	R.C. FRAME		-
3	WALLING		-
4	ROOFING AND RAIN WATER DISPOSAL		-
5	DOORS		-
6	EXTERNAL FINISHES		-
7	INTERNAL FINISHES		-
8	JOINERY FITTINGS		-
9	ELECTRICAL INSTALLATIONS		-
10	MECHANICAL INSTALLATIONS		-
	TOTAL BILL No. 2.4 CARRIED TO BILL No 2 SUMMARY		-

.24/S

KAEKEM RANGER POST

OFFICE AND STORE

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO. 1</u> <u>SUBSTRUCTURES</u> <u>ALL PROVISIONAL</u> <u>The work in this element includes all works up to and including the ground floor slab</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Excavate oversite average 200mm deep to remove vegetable top soil; remove from site	SM	50		
D	Mass excavation to reduce levels not exceeding 1.2.5 meters deep from stripped level.	CM	25		
E	Excavate for foundation trench not exceeding 1.2.5 meters deep from reduced level.	CM	40		
G	Extra over excavations for excavating in rock.	CM	5		
H	Return fill and ram selected excavated material around foundations.	CM	30		
J	Load and cart away surplus excavated material from site.	CM	10		
K	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	CM	25		
L	Approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	13		
M	200mm Thick bed of hand packed stone base, well rolled and compacted.	SM	25		
N	50mm thick stone dust blinding over surfaces of hardcore	SM	25		
P	Prepare and apply Chlorpyrifos insecticide treatment or equal and approved to; surface of 50mm thick blinding, tops of foundation walling, sides and bottoms of excavations	SM	50		
	<u>CONCRETE WORK</u> <u>PLAIN CONCRETE CLASS 10; 20mm AGGREGATE : in</u>				
Q	50mm Thick blinding layer under strip foundations	SM	20		
	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 18mm AGGREGATE : in</u>				
R	100mm thick ground floor slab	SM	25		
S	150mm thick ground floor slab	SM	6		
	TOTAL CARRIED TO COLLECTION				-

.25/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED MASS CONCRETE CLASS 25; 20mm AGGREGATE : in</u>				
A	Strip foundations	CM	5		
B	100mm Thick ramp laid to slope not exceeding 150 to horizontal, including forming 25 x 20mm deep V-groove bands	SM	4		
C	Ground beams	CM	2		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u>				
	<u>MILD STEEL ROUND BARS TO BS 4449</u>				
D	8mm Diameter bars	KG	100		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
E	12mm Diameter bars	KG	250		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
F	No. A142 Fabric Mesh reinforcement weighing 2.22 kg. per square meter fixed in slab	SM	25		
	<u>FORMWORK TO</u>				
G	Sides of ground beams	SM	20		
H	Sides of strip foundation	SM	15		
J	Edges of slabs 75 to 150mm high	LM	24		
	<u>DAMP PROOF COURSES</u>				
K	1000 Gauge polythene sheeting laid on blinded hardcore	SM	25		
	<u>WALLING</u>				
	<u>Solid concrete blockwork load bearing (7.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar : with and including hoop iron wall ties every alternative course : in</u>				
L	200mm Thick walls	SM	40		
	<u>TWO COATS EXTERNAL CEMENT RENDER (1:4) finished with wood float</u>				
M	12mm thick to walls	SM	30		
	<u>TWO COATS BLACK BITUMASTIC paint : on</u>				
N	Rendered walls	SM	30		
	<u>SPLASH APRON</u>				
	<u>MARRUM FILL in splash apron</u>				
P	150mm thick approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	SM	15		
	TOTAL CARRIED TO SUMMARY				-

.2.5/1/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 20mm</u>				
	<u>AGGREGATE : in</u>				
A	100mm thick splash apron slab	SM	15		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
B	No. A142 Fabric Mesh reinforcement weighing .2.52 kg. per square meter fixed in slab	SM	15		
	<u>CEMENT AND SAND (1:3) SCREEDS finished smooth</u>				
C	25mm Thick paving	SM	15		
	<u>Splash apron drainage channel</u>				
	<u>300mm diameter (internal) drainage channel comprising : 100mm</u>				
	<u>Thick reinforced concrete Class 25 : sides and bases reinforced with</u>				
	<u>A142 BRC fabric mesh reinforcement; finished with Colas SBS water</u>				
	<u>proofing on cement sand screed; : including excavation, disposal</u>				
	<u>and formwork as per Architects detailed drawing</u>				
D	500 x 300mm deep(average depth) channel	LM	18		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total brought forward from Page .2.5/1/1				-
	Total brought forward from Page .2.5/1/2				-
	Total brought forward from Page .2.5/1/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.5/1/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO.2</u> <u>R.C. FRAME</u> <u>CONCRETE WORK</u> <u>VIBRATED REINFORCED CONCRETE CLASS 25; 20mm</u> <u>AGGREGATE : in</u>				
A	Ring beams	CM	2		
B	Infill hollow concrete blockwork walling	CM	5		
C	150mm thick Suspended slab	SM	6		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u> <u>MILD STEEL ROUND BARS TO BS 4449</u>				
D	8mm Diameter bars	KG	100		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
E	12mm Diameter bars	KG	540		
	<u>FORMWORK TO:</u>				
F	Sides and soffits of ring beams	SM	25		
G	Soffits of Suspended slab	SM	6		
	TOTAL CARRIED TO SUMMARY				-

.25/2/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO.3</u> <u>WALLING</u> <u>PRECAST CONCRETE CLASS 20; 20mm AGGREGATE : finished fair on all exposed surfaces including bedding and jointing in cement sand (1:3) mortar</u>				
A	150 x 200mm Lintels	LM	11		
B	305 x 75mm Weathered and throated window cill	LM	8		
	<u>BLOCK WORK</u> <u>Solid Concrete blockwork load bearing (7.0N/mm2) to BS 5628 jointed and pointed in cement sand (1:3) mortar with and including hoop iron wall ties every alternative course : in</u>				
C	200mm Thick walls	SM	62		
	<u>Hollow Concrete blockwork load bearing (7.0N/mm2) to BS 5628 jointed and pointed in cement sand (1:3) mortar with and including , hoop iron wall ties every alternative course infilling hollow void with insitu concrete(m.s) : in</u>				
D	200mm Thick walls	SM	30		
	<u>DAMP PROOF COURSE OF BITUMEN FELT TO B.S 743 Type A with 150mm laps including cement and sand (1:3) levelling bed</u>				
E	200mm Wide	LM	29		
	<u>BURNT CLAY BRICKS VENTS, 200mm thick filled with Kajjansi ventilation bricks or equal and approved secured, bedded, jointed and pointed in cement sand mortar (1:3) with and including insect/bat proof netting complete with all necessary timber framing.</u>				
F	Vent 01 1200 wide x 200mm high	NO	2		
G	Vent 02 Size 1000 wide x 200mm high	NO	3		
H	Vent 03 Size 600mm diameter	NO	2		
	TOTAL CARRIED TO SUMMARY				-

.2.5/3/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.5 OFFICE AND STORE ELEMENT NO.4 ROOF AND RAINWATER DISPOSAL Structural Steelwork THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS The following in metallic trusses with and including all, bolting, knotting, welding works, connections, hoisting and fixing approximately . 4.0 metres above existing ground level The following are 3 number Truss type T1;				
A	50 x 50 x 3mm RHS Top chord	KG	80		
B	50 x 50 x 3mm RHS Bottom chord	KG	60		
C	40 x 40 x 3mm RHS Intermediate members	KG	60		
D	40 x 40 x 3mm Angles roof wind bracing	KG	20		
E	150 x 50 x 25.2.5 x 2mm Z - Purlins weighing 4.33 Kg. per meter: bolted	KG	250		
	SUNDRIES				
F	200 x 200 x 6mm Plate: 4 No holes for 20mm diameter J-bolts	NO	6		
G	16mm Diameter J bolt; 250mm Long; head, nut and washers	NO	24		
	ROOF COVERING				
	26 Gauge pre-painted IT4 roofing sheets : fixed to Z-purlins with J-bolts : in				
H	Sheet laid to attain a slope of 22.2.5 degrees from horizontal.	SM	46		
J	300mm Wide ridge flashing	LM	10		
	MILD STEEL, GRADE GJ				
M	230 x 2mm thick plate fascia; curved to form groove to the edges welded onto steel rafters; one coat red oxide primer	LM	28		
	TOTAL CARRIED TO COLLECTION				-

.25/4/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>RAIN WATER DISPOSAL</u>				
	<u>PVC Key terrain fixed in accordance with manufacturer's instructions</u>				
A	Terrain water system or other equal and approved 250 wide x 150mm deep x 3mm thick U-shaped PVC rainwater gutter fixed fascia board with holding clumps secured with approved bolts	LM	18		
B	110mm diameter PVC down pipe	LM	8		
C	Extra over gutter for outlet to suit 110mm diameter pipe.	NO	2		
D	Extra over gutter for valley hoppers	NO	2		
E	Ditto for bends.	NO	2		
F	Extra over for bends.	NO	2		
G	Extra over for horse shoe.	NO	2		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total carried forward from Page .2.5/5/1				-
	Total carried forward from Page .2.5/5/2				-
	TOTAL CARRIED TO SUMMARY				-

.2.5/4/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO. 5</u> <u>DOORS</u> <u>METALLIC WORK</u> <u>Purpose made steel casement Doors manufactured from standard casement 2.0mm thick sections : manufacture, assemble and deliver to site: supply and fix all approved UNION or equal ironmongery : with and including 2mm thick impact plates, 20 x 20 x 2mm SHS burglar proof grils, and door frames fixing drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</u>				
A	Door D1 overall size 1000 x 2100mm high (overall) as per Architect's detailed drawing	NO	3		
B	Door D2 overall size 900 x 2100mm high (overall) Security door with 4mm thick impact plates on both faces (front and back), 4mm thick frame, supports and frame section as per Architect's detailed drawing	NO	2		
	<u>Glass and Glazing</u>				
C	6mm thick clear sheet glass to metal doors with putty <u>PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on metal work</u>	SM	1		
D	to Metallic surface	SM	13		
	TOTAL CARRIED TO SUMMARY				-

.2.5/5/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO. 6</u> <u>WINDOWS</u> <u>WROT-MAHOGANY selected, treated and kept clean</u>				
A	Timber brackets including 25mm stainless steel curtain rod	LM	5		
	<u>PREPARE AND APPLY THREE Coats gloss oil paint in accordance with manufacturer's instructions : on wood : to</u>				
B	Surfaces 200 - 300mm girth	LM	5		
	<u>METAL WORK</u> <u>PURPOSE MADE STEEL CASEMENT WINDOWS manufactured from standard window casement 2.2.5mm thick sections : manufacture, assemble and deliver to site: supply and fix sliding aluminium insect mesh and shutters and approved mesh, ironmongery comprising approved hinges, pivoting mechanisms, stays, fasteners to opening lights: provide permanent vents: frames drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery, as per Architect's detailed drawing.</u>				
	<u>The bidder is advised to study the architectural drawings carefully and consult the architect in case of doubt as no claim will be entertained on ground of inadequacy of description of any item.</u>				
C	Window W01 Size 1200 x 1200mm high (overall)	NO	2		
D	Window W02 Size 900 x 600mm high (overall)	NO	1		
	<u>PURPOSE MADE STANDARD Steel burglar proofing made from 20 x 20 x 2mm SHS and 40 x 3mm flats : one coat red oxide primer as per Architect's detailed drawing</u>				
E	Window W01 Size 1200 x 1200mm high (overall)	NO	2		
F	Window W02 Size 900 x 600mm high (overall)	NO	1		
	<u>Glass and Glazing</u>				
G	5mm thick clear sheet glass to metal windows with putty	SM	5		
	<u>PREPARE SURFACE AND APPLY ETCHING PRIMER; apply one coat primer, one undercoat and two Gloss finishing coats; on metal work : to</u>				
H	Metallic Windows	SM	12		
J	Burglar proofing	SM	12		
	TOTAL CARRIED TO COLLECTION				-

.25/6/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO.7</u> <u>EXTERNAL FINISHES</u> <u>WALL FINISHES</u> <u>CEMENT AND WASHED SAND (1:3) RENDER trowelled smooth</u>				
A	12mm Thick to walls.	SM	82		
	<u>PAINTING AND DECORATING</u> <u>PREPARE AND APPLY THREE COATS first grade weatherguard emulsion paint : externally; on</u>				
B	Rendered surfaces	SM	82		
	<u>PIGMENTED TYROLEAN, CEMENT AND WASHED SAND sprayed onto;</u>				
C	10mm thick three layer work to concrete surfaces and including 13mm cement and sand (1:3) base	SM	56		
	TOTAL CARRIED TO SUMMARY				-

.25/7/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.5				
	OFFICE AND STORE				
	ELEMENT NO.8				
	INTERNAL FINISHES				
	FLOOR FINISHES				
	CEMENT AND SAND (1:4) SCREEDS finished to the floor				
A	45mm thick finished smooth	SM	24		
B	20 x 120mm skirting rounded edge top	LM	35		
	WALL FINISHES				
	INTERNAL LIME PLASTER First coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth				
C	18mm Thick two coat work to walls	SM	110		
	PREPARE AND APPLY ONE MIST COAT AND THREE COATS silk vinyl emulsion paint internally on:				
D	Plastered surfaces	SM	110		
	CEILING FINISHES				
	Expanded Metal Lath Plastered ceiling comprising, expanded metal lath weighing 2.2.5kg/m2, staple to 100 x 50mm joist, 50 x 50mm branderings softwood framing(m.s) at 600mm centres both ways; metal lath nailed onto framework; 15mm cement sand (1:4) pricking course including 12mm lime plaster				
E	Ceiling	SM	24		
F	Extra over 50 mm High x 10 mm wide cornice to Architects details	LM	30		
G	Extra over for 600 x 600mm trap door	NO	2		
	Internal lime plaster first coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.6) Steel trowelled smooth				
	15mm thick to metal lathe ceiling	SM	24		
	PREPARE AND APPLY ONE MIST COAT AND THREE FINISHING COATS first grade matt emulsion paint : on				
H	Ceiling soffits	SM	24		
J	Ditto; 75mm thick cornice	LM	30		
	FIXTURES AND FITTINGS				
K	Allow a provisional sum of Uganda Shillings Two Million (Ugx 2,000,000) for the installation of fixtures and fittings to include shelves and lockers	Sum	1		
	TOTAL CARRIED TO SUMMARY				-

.2.5/8/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO. 9</u> <u>ELECTRICAL INSTALLATIONS</u> <u>ALL SPECIFIED MATERIALS - GENERAL NOTES</u></p> <p>To be supplied, delivered to Site, installed, connected complete and commissioned in full working condition including all the necessary fixing/mounting/terminating accessories as per Specification and Drawings, tested and commissioned to the satisfaction of the Engineer.</p> <p>i)</p> <p>All Main / Sub-Main Distribution Panel MCCB Boards as well as MCB Distribution Boards, must meet US/EU Certification and approved by the project manager</p> <p>ii)</p> <p>All power supply cables measured under this Bills of Quantities have provisional route length stated. Actual measurements will be done on site during evaluation.</p> <p>iii)</p> <p>All underground reticulation and distribution cables are to be supplied and installed c/w all necessary fixing / clipping / supporting / glanding and termination accessories as per general specification and type approved by the Engineer.</p> <p>iv)</p> <p>All indoor cables are to recessed within the cable ducts, ceiling voids, wall fabric enclosed in suitably sized PVC conduits neatly installed as per Drawings and to approval by the Engineer.</p> <p>v)</p> <p>All lightings fittings shall be as per Specifications and Drawings with electronic control gear compatible with 240V/50Hz. All lighting fittings are to be approved by the Engineer prior to installation.</p> <p>vi)</p> <p>All Fire Detection and Alarm System elements shall be as per Specifications and Drawings.</p> <p>vii)</p> <p>All wiring accessories shall be as per Specifications and Drawings (or otherwise specified) complete with all attachments and accessories. All samples to be approved prior to installation by the Engineer.</p> <p>viii)</p> <p>The entire electrical installation shall be tested for compliance in accordance to the 16th Edition of the IEE Wiring Regulations and witnessed / approved by the Engineer</p> <p>ix)</p> <p>TOTAL CARRIED TO COLLECTION</p>				-

.2.5/9/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>CONSUMER UNIT</u>				
A	100A, 6 Way Consumer unit, with 100A SP RCD mains isolator , complete with busbars 3x6A SP RCBOs, 3Nox32A SP RCBOs and complete with all accessories .The rate includes accurate labelling of all loads connected accordingly to the Consumer Unit (for Sockets and Lighting).	NO	1		
	<u>LIGHTING FITTINGS</u>				
B	Pendant/fixed lamp holder with ceiling rose complete with screw tropical daylight bulbs, of no more than 5W	NO	2		
C	Weather proof fixed lamp holder suitable for outdoors complete with screw tropical daylight bulbs, of no more than 8W	NO	4		
	<u>WIRING ACCESSORIES:</u>				
	<u>All wiring accessories are to be brushed stainless steel metal clad. All must meet US/EU Certification and approved by the project manager.</u>				
D	6A/240V SP 1-Gang 1-Way plate switches c/w flush mounting box, and accessories.	NO	3		
E	13A SP 2-Gang plate switched socket outlets c/w neon indicator and flush mounting box.	NO	1		
	<u>WIRING</u>				
	<u>Lighting points:</u>				
F	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers, using 3x2.2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits through switches, and as per drawings.	NO	2		
	<u>Power points:</u>				
G	All wiring of all power points are to be connected complete and ready from 32A SP miniature circuit breakers, using 3x2.2.5mm sq. PVC-Insulated single core copper cables in ring circuit, drawn in trunking/conduits, as per drawings.	NO	1		
	<u>External Lighting points:</u>				
H	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers of DBs, using 2.2.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits, as per drawings.	NO	4		
	TOTAL CARRIED TO COLLECTION				-

.2.5/9/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>LIGHTNING PROTECTION SCHEME</u> <u>All items are to be supplied must meet US/EU Certification and approved by the project manager. and installed complete with all the required mounting, fixing, clipping, testing, connecting accessories, connected, tested and commissioned to the satisfaction of the Electrical Engineer.</u>				
A	25mm x 3mm copper tape.	LM	15		
B	25mm x 3mm copper square test clamp.	NO	2		
C	2000mm x 15mm air rod, c/w multiple point, air terminal base, and ridge saddle.	NO	1		
D	25mm x 3mm tape clip	NO	10		
E	1200mm x 20mm solid copper earth rod, complete with driving stud and coupler, and accessories.	NO	2		
F	Approved Concrete inspection chamber.	NO	2		
G	Testing commissioning and documenting test results.	ITEM	1		
H	Production of As built drawings.	ITEM	1		
	<u>SOLAR SYSTEM</u> Solar Panels, Charge controllers, Inverter/chargers, batteries to be supplied must all meet US/EU Certification and approved by the project manager, installed and commissioned in full working condition including all necessary accessories.				
J	320W 12V Monocrystalline solar module	NO	3		
K	Anti-theft lockable Panel frames each to house Solar modules in item above.	NO	1		
L	1000VA 24V Pure sine wave inverter	NO	1		
M	Solar charge controller 30A	NO	1		
N	12V/200AH Lithium Ion (or LiPO4)batteries to approved manufacture	NO	2		
P	Metallic Battery Bank box to house the batteries.	NO	1		
R	Testing commissioning and documenting test results.	ITEM	1		
S	Production of As built drawings.	ITEM	1		
T	Allow for wiring between solar panels, to Inverter, and to the batteries	ITEM	1		
U	Allow for 3Cx16mm, armoured copper cables from Inverter to consumer unit	m	25		
V	Allow for earthing of the installation including inverter, consumer unit, to achieve earth resistance of 1 ohm (Complete with 2No copper rods, earth pit inspection manhole, earth wire, salt/charcoal dust and all accessories	ITEM	1		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total Carried Forward From Page 2.5/9/2				-
	Total Carried Forward From Page 2.5/9/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.5/9/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.5</u> <u>OFFICE AND STORE</u> <u>ELEMENT NO.10</u> <u>MECHANICAL INSTALLATIONS</u> <u>RAIN WATER HARVESTING</u>				
A	Approved 10,000L PVC tanks complete with 25mm ball valve, 25mm washout and 25mm overflow pipe.	NO	2		
B	110mm PN6 PVC pipe from Roof gutters to water tank	LM	9		
C	15mm Stop Cock as Peglar or equal and approved	NO	2		
D	Allow for the construction of tank stand base comprising of 600 x 300mm grade 25 concrete strip, 300mm thick stone wall rendered, 150mm thick top slab, with marrum in fill, measuring 3.5M diameter wide by 500mm high (above ground/floor level)	ITEM	2		
	TOTAL CARRIED TO SUMMARY				-

.25/10/1

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (Ugx)
	<u>BILL No .2.5</u>		
	<u>OFFICE AND STORE</u>		
	<u>SUMMARY</u>		
1	SUBSTRUCTURES		-
2	R.C. FRAME		-
3	WALLING		-
4	ROOFING AND RAIN WATER DISPOSAL		-
5	DOORS		-
6	WINDOWS		-
7	EXTERNAL FINISHES		-
8	INTERNAL FINISHES		-
9	ELECTRICAL INSTALLATIONS		-
10	MECHANICAL INSTALLATIONS		-
	TOTAL BILL No .2.5 CARRIED TO BILL No 2 SUMMARY		-

.2.5/S

KAEKEM RANGER POST

VIP LATRINE

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO. 1</u> <u>SUBSTRUCTURES</u> <u>ALL PROVISIONAL</u> <u>The work in this element includes all works up to and including the ground floor slab</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Excavate oversite average 200mm deep to remove vegetable top soil; remove from site	SM	70		
D	Mass excavation to reduce levels not exceeding 1.50 meters deep from stripped level.	CM	18		
E	Excavate for foundation trench not exceeding 1.50 meters deep from reduced level.	CM	35		
F	Excavate for pit exceeding 1.50 meters deep from reduced level.	CM	10		
G	Ditto over 1.50 but not exceeding 3.00 meters	CM	10		
H	Ditto over 3.00 but not exceeding 4.50 meters	CM	4		
J	Extra over excavations for excavating in rock.	CM	10		
K	Return fill and ram selected excavated material around foundations.	CM	25		
L	Load and cart away surplus excavated material from site.	CM	20		
M	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	CM	42		
N	Approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	9		
P	200mm Thick bed of hand packed stone base, well rolled and compacted.	SM	24		
Q	50mm thick stone dust blinding over surfaces of hardcore	SM	24		
R	Prepare and apply Chlorpyrifos insecticide treatment or equal and approved to; surface of 50mm thick blinding, tops of foundation walling, sides and bottoms of excavations	SM	78		
S	<u>PLAIN CONCRETE CLASS 10; 20mm AGGREGATE : in</u> 50mm Thick blinding layer under strip foundations	SM	28		
	TOTAL CARRIED TO COLLECTION				-

.2.6/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>VIBRATED REINFORCED CONCRETE CLASS 25; 20mm AGGREGATE : in</u>				
A	Ground Beams	CM	1		
B	150mm thick ground floor slab	SM	30		
	<u>VIBRATED MASS CONCRETE CLASS 25; 20mm AGGREGATE : in</u>				
C	Strip foundations	CM	4		
D	100mm Thick ramp laid to slope not exceeding 150 to horizontal, including forming 25 x 20mm deep V-groove bands	SM	3		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u>				
	<u>MILD STEEL ROUND BARS TO BS 4449</u>				
E	8mm Diameter bars	KG	40		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
F	8mm Diameter bars	KG	50		
G	12mm Diameter bars	KG	210		
	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u>				
H	No. A142 Fabric Mesh reinforcement weighing 2.22 kg. per square meter fixed in slab	SM	30		
	<u>FORMWORK TO</u>				
J	Sides of strip foundation	SM	12		
K	Sides of ground beams	SM	9		
L	Soffit of slab	SM	9		
M	Edges of slabs 75 to 150mm high	LM	24		
	<u>DAMP PROOF COURSES</u>				
N	1000 Gauge polythene sheeting laid on blinded hardcore	SM	30		
	<u>WALLING</u>				
	<u>Approved burnt brickwork load bearing (6.0N/mm²) to BS 5628 jointed and pointed in cement sand (1:3) mortar : with and including hoop iron wall ties every three course : in</u>				
P	200mm Thick walls	SM	56		
	<u>TWO COATS EXTERNAL CEMENT RENDER (1:4) finished with wood float</u>				
Q	12mm thick to walls	SM	42		
	<u>TWO COATS BLACK BITUMASTIC paint : on</u>				
R	Rendered walls	SM	42		
	TOTAL CARRIED TO COLLECTION				-

.26/1/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<u>SPLASH APRON</u> <u>MARRUM FILL in splash apron</u> 150mm thick approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	SM	12		
B	<u>VIBRATED REINFORCED CONCRETE CLASS 20; 20mm AGGREGATE : in</u> 100mm thick splash apron slab	SM	14		
C	<u>STEEL FABRIC REINFORCEMENT TO BS 4483 as described</u> No. A142 Fabric Mesh reinforcement weighing 2.22 kg. per square meter fixed in slab	SM	16		
D	<u>WALLING</u> <u>Solid concrete blockwork load bearing (7.0N/mm2) to BS 5628 jointed and pointed in cement sand (1:3) mortar : with and including hoop iron wall ties every alternative course : in</u> 150mm Thick walling including grade 20 concrete footing	SM	16		
E	<u>CEMENT AND SAND (1:3) SCREEDS finished smooth</u> 25mm Thick paving	SM	14		
F	<u>Splash apron drainage channel</u> <u>300mm diameter (internal) drainage channel comprising : 100mm Thick precast reinforced concrete Class 25 : sides and bases reinforced with A142 BRC fabric mesh reinforcement; finished with Colas SBS water proofing on cement sand screed; : including excavation, disposal and formwork as per Architects detailed drawing</u> 500 x 300mm deep(average depth) channel	LM	10		
	TOTAL CARRIED TO COLLECTION				-
	COLLECTION				
	Total brought forward from Page .2.6/1/1				-
	Total brought forward from Page .2.6/1/2				-
	Total brought forward from Page .2.6/1/3				-
	TOTAL CARRIED TO SUMMARY				-

.2.6/1/3

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.2</u> <u>R.C. FRAME</u> <u>CONCRETE WORK</u> <u>VIBRATED REINFORCED CONCRETE CLASS 25; 20mm</u> <u>AGGREGATE : in</u>				
A	Ring beams	CM	1		
	<u>STEEL REINFORCEMENT as described including cutting to length, bending, hoisting and fixing and including all necessary tying wire and spacing blocks</u> <u>MILD STEEL ROUND BARS TO BS 4449</u>				
B	8mm Diameter bars	KG	25		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
C	12mm Diameter bars	KG	40		
	<u>FORMWORK TO:</u>				
D	Sides and soffits of ring beams	SM	6		
	TOTAL CARRIED TO SUMMARY				-

.2.6/2/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.3</u> <u>WALLING</u> <u>BLOCK WORK</u> <u>Solid Concrete blockwork load bearing (7.0N/mm²) to BS 5628</u> <u>jointed and pointed in cement sand (1:3) mortar with and including</u> <u>hoop iron wall ties every alternative course : in</u>				
A	150mm Thick walls <u>PRECAST CONCRETE CLASS 20; 20mm AGGREGATE : finished</u> <u>fair on all exposed surfaces including bedding 100mm concrete</u> <u>edges and jointing in cement sand (1:3) mortar</u>	SM	80		
B	200 x 50mm Thick concrete copying <u>DAMP PROOF COURSE OF BITUMEN FELT TO B.S 743 Type</u> <u>A with 150mm laps including cement and sand (1:3) levelling bed</u>	LM	20		
C	150mm Wide <u>BURNT CLAY BRICKS VENTS, 200mm thick filled with Kajjansi</u> <u>ventilation bricks or equal and approved secured, bedded, jointed</u> <u>and pointed in cement sand mortar (1:3) with and including</u> <u>insect/bat proof netting complete with all necessary timber framing.</u>	LM	36		
D	Vent 02 Size 1000 wide x 200mm high	NO	4		
TOTAL CARRIED TO SUMMARY					-

.2.6/3/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.4</u> <u>ROOF AND RAINWATER DISPOSAL</u> <u>Structural Steelwork</u> <u>THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS</u>				
A	50 x 50 x 3mm RHS Top chord	LM	56		
B	50 x 50 x 3mm RHS Bottom chord	LM	50		
C	40 x 40 x 3mm RHS Tie and struts	LM	45		
D	150 x 50 x 25.5 x 2mm Z - Purlins weighing 4.33 Kg. per meter: bolted	LM	95		
	<u>SUNDRIES</u>				
E	200 x 200 x 6mm Plate: 4 No holes for 20mm diameter J-bolts	NO	6		
F	16mm Diameter J bolt; 250mm Long; head, nut and washers	NO	24		
	<u>ROOF COVERING</u>				
	<u>26 Gauge pre-painted IT4 roofing sheets : fixed to Z-purlins with J-bolts : in</u>				
G	Sheet laid to slope of 22.5 degrees from horizontal.	SM	19		
	<u>MILD STEEL, GRADE GJ</u>				
H	230 x 3mm thick plate fascia; curved to form groove to the edges welded onto steel rafters; one coat red oxide primer	LM	19		
	<u>RAIN WATER DISPOSAL</u>				
	<u>PVC Key terrain fixed in accordance with manufacturer's instructions</u>				
J	Terrain water system or other equal and approved 250 wide x 150mm deep x 3mm thick U-shaped PVC rainwater gutter fixed fascia board with holding clumps secured with approved bolts	LM	8		
K	110mm diameter PVC down pipe	LM	8		
L	Extra over gutter for outlet to suit 110mm diameter pipe.	NO	2		
M	Extra over for bends.	NO	2		
N	Extra over for horse shoe.	NO	2		
	TOTAL CARRIED TO SUMMARY				-

.2.6/4/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO. 5</u> <u>DOORS</u> <u>METALLIC WORK</u> <u>Purpose made steel casement Doors manufactured from standard casement 1.8mm thick sections : manufacture, assemble and deliver to site: supply and fix all approved UNION or equal ironmongery : with and including door frames, 20 x 20 x 2mm SHS burglar proof grils, fixing drilled, plugged and screwed or built into walling: one coat red oxide primer before delivery.</u>				
A	Door D1 overall size 800 x 2100mm high (overall) ditto	NO	4		
B	Door D2 overall size 750 x 1800mm high (overall) ditto	NO	2		
C	Door D3 overall size 1600 x 1800mm high (overall) ditto	NO	1		
	<u>PREPARE SURFACE AND APPLY THREE COATS, Gloss oil paint in accordance with manufacturer's instructions : on metal work : to</u>				
D	Metallic surface	SM	30		
	TOTAL CARRIED TO SUMMARY				-

.2.6/5/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.2.6</u> <u>EXTERNAL FINISHES</u> <u>WALL FINISHES</u> <u>CEMENT AND WASHED SAND (1:3) RENDER trowelled smooth</u>				
A	12mm Thick to walls.	SM	105		
	<u>PAINTING AND DECORATING</u> <u>PREPARE AND APPLY THREE COATS first grade weather guard emulsion paint : externally; on</u>				
B	Rendered and tyrolean surfaces	SM	105		
	<u>PIGMENTED TYROLEAN, CEMENT AND WASHED SAND sprayed onto;</u>				
C	10mm thick three layer work to concrete surfaces and including 13mm cement and sand (1:3) base	SM	40		
TOTAL CARRIED TO SUMMARY					-

.2.6/6/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.7</u> <u>INTERNAL FINISHES</u> <u>WALL FINISHES</u> <u>INTERNAL LIME PLASTER First coat of cement lime and sand (1:2:9) second coat of cement, lime putty and sand (1:1.2.6) Steel trowelled smooth</u>				
A	12mm Thick two coat work to walls <u>Painting and Decorating</u> <u>PREPARE AND APPLY ONE MIST COAT AND THREE COATS silk vinyl emulsion paint internally on:</u>	SM	60		
B	Plastered surfaces <u>FLOOR FINISHES</u> <u>POLISHED TERRAZO: FIRST COAT OF 25MM THICK WATERPROOFED CEMENT AND SAND (1:3) SCREED, second coat of 25mm thick coloured cement and approved marble aggregates (1:2:5), including 25 x 3mm pvc dividing strips at 1200mm centres polished five(5) times to architect approval</u>	SM	60		
C	Floors	SM	28		
D	Curved at junction average diameter 200 x 10mm thick skirting <u>200 x 300 x 8mm approved CERAMIC WALL TILES and bedding and pointing in approved waterproof grout including 1:3 mortar bedding, corner strips and round edges : to</u>	LM	66		
E	Walls	SM	8		
	TOTAL CARRIED TO SUMMARY				-

.2.6/7/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<p><u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.8</u> <u>MECHANICAL INSTALLATIONS</u> <u>SANITARY FITTINGS</u> <u>INTERNAL WATER SUPPLY AND DISTRIBUTION</u> <u>The Contractor shall supply, deliver, install, test and commission to the satisfaction of the Engineer the following including builders works:-</u> <u>The Tenderers must allow in their prices for all couplings, connectors as required in the running lengths of pipes</u> <u>DRAINAGE</u> <u>Supply and Install the following including clamps/ brackets for supporting pipes, builders works which involves making good to any openings made in floor slabs and chiselling of walls</u> <u>The pipes to be Polypropylene Upvc pipes as per drawings, Complete with all accessories including all associated builders works.</u> <u>uPVC Pipes PN6</u> A 40mm Complete with Tees, Bends, Reducers, Access plugs, necessary fittings and accessories. LM 5 B 110mm Complete with Tees, Bends, Reducers, Access plugs, necessary fittings and accessories. LM 2 C Ditto 110mm soil vent pipe necessary fittings and accessories. NO 1 D 110 x 50mm PVC Floor trap NO 2 E Stainless steel grating 150x 150 NO 2 <u>SATO Pan</u> F SATO Pan retrofitted directly on existing or new open pit latrine, squatting type, Plastic material, Model SATO 146, Flex Install Toilet Pan with quiet close as to Nice SATO Toilet Pan, Nice House of Plastics, LIXIL or equal and approved NO 4 <u>External Drainage</u> G 110mm PVC heavy gauge pipework buried in the ground to a fall of 1:60 complete with excavations, bedding, backfilling and all accessories. M 15 H Gully Trap (GT) complete with PVC trap, masonry construction 300x300mm, with steel cover and all accessories. NO 2 J Soak Pit Size approx. 2500mm on top tapering to 1500mm and depth of 1500mm complete with hardcore and all accessories. NO 1</p>				
	TOTAL CARRIED TO SUMMARY				-

.2.6/8/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.6</u> <u>VIP LATRINES</u> <u>ELEMENT NO.9</u> <u>ELECTRICAL INSTALLATIONS</u> <u>SOLAR LIGHTING</u> <u>CONSUMER UNIT</u>				
A	100A, 4 Way Consumer unit, with 100A SP RCD mains isolator , complete with busbars 3x6A SP RCBOs, 1Nox32A SP RCBOs and complete with all accessories .The rate includes accurate labeling of all loads connected accordingly to the Consumer Unit	NO	1		
B	500VA 24V Pure sine wave inverter	NO	1		
C	320W 12V Monocrystalline solar module	NO	1		
D	Anti-theft lockable Panel frames each to house Solar modules in item above.	NO	1		
E	Solar charge controller 30A	NO	1		
F	12V/200AH Lithium Ion (or LiPO4)batteries to approved manufacture	NO	1		
G	Metallic Battery Bank box to house the batteries.	NO	1		
J	Allow for wiring between solar panels, to Charge controller, and to the batteries	ITEM	1		
L	Allow for earthing of the installation including inverter, consumer unit, to achieve earth resistance of 1 ohm (Complete with 2No copper rods, earth pit inspection manhole, earth wire, salt/charcoal dust and all accessories	ITEM	1		
L	Allow for 3Cx16mm, armoured copper cables from Inverter to consumer unit	m	20		
M	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers, using 3x1.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits through switches, and as per drawings.	NO	10		
N	DC Pendant/fixed lamp holder with ceiling rose complete with screw tropical daylight bulbs, of no more than 5W	NO	6		
P	Weather proof luminaire, complete with holder suitable for outdoors complete with screw tropical daylight bulbs, of no more than 8W DC light	NO	4		
	TOTAL CARRIED TO SUMMARY				-

.2.6/9/1

ELEMENT	DESCRIPTION	PAGE NO	AMOUNT (Ugx)
	<u>BILL No. 2.6</u>		
	<u>VIP BLOCK</u>		
	<u>SUMMARY</u>		
1	SUBSTRUCTURES		-
2	R.C. FRAME		-
3	WALLING		-
4	ROOFING AND RAIN WATER DISPOSAL		-
5	DOORS		-
6	EXTERNAL FINISHES		-
7	INTERNAL FINISHES		-
8	MECHANICAL INSTALLATIONS		-
9	ELECTRICAL INSTALLATIONS		-
	TOTAL BILL No 2.6 CARRIED TO BILL No 3 SUMMARY		-

.2.6/S

KAEKEM RANGER POST

OBSERVATION TOWER

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No. 2.7</u>				
	<u>OBSERVATION TOWER</u>				
	<u>NINE METER HIGH TOWER</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Mass excavation to reduce levels not exceeding 1.5 meters deep .	CM	8		
D	Excavate for column bases not exceeding 1.5 meters deep from reduced level.	CM	20		
E	Extra over excavations for excavating in rock.	CM	2		
F	Return fill and ram selected excavated material around foundations.	CM	16		
G	Load from spoil heaps, spread and level surplus excavated materials where directed on site including compacting in layers not exceeding 150mm thick using 15 ton vibrating roller to 95% MDD to Engineer's approval	CM	12		
	<u>CONCRETE WORK</u>				
	<u>PLAIN CONCRETE CLASS 10; 20mm AGGREGATE : in</u>				
H	50mm Thick blinding layer under bases	SM	8		
	<u>VIBRATED REINFORCED CONCRETE CLASS 25; 20mm AGGREGATE : in</u>				
J	Column bases	CM	2		
K	Column	CM	1		
L	Ground beam	CM	1		
	<u>STEEL REINFORCEMENT</u>				
	<u>MILD STEEL ROUND BARS TO BS 4449</u>				
M	10mm Diameter bars	KG	144		
	<u>HIGH TENSILE RIBBED BARS TO BS 4449</u>				
N	12mm Diameter bars	KG	132		
P	16mm Diameter bars	KG	140		
	<u>FORMWORK TO</u>				
Q	Sides of bases	SM	8		
R	Sides of columns	SM	6		
S	Sides of ground beam	SM	16		
	TOTAL CARRIED TO COLLECTION				-

.2.7/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.7				
	OBSERVATION TOWER				
	NINE METER HIGH TOWER				
	<u>THE RATES FOR STRUCTURAL STEEL WORK SHOULD INCLUDE ALL PLATES, STIFFENERS, BOLTS, TIG WELDED JOINTS, ALL CONNECTIONS AND ACCESSORIES; PAINTING AND DECORATIONS; AS PER THE ARCHITECT'S AND STRUCTURAL ENGINEERS DRAWINGS; THE CONTRACTOR MUST STUDY THE DRAWINGS AND ENSURE THAT HIS PRICE INCLUDES ALL ITEMS AS SHOWN ON THE DRAWINGS</u>				
A	100 x 100 x 4mm SHS columns	KG	640		
B	100 x 100 x 4mm SHS beams	KG	1500		
C	50 x 50 x 4mm Angles bracing	KG	380		
D	60 x 60 x 3mm Angles bracing	KG	60		
E	100 x 100 x 4mm SHS floor supports	KG	380		
F	100 x 100 x 4mm SHS floor bracings	KG	160		
G	100 x 100 x 4mm stair channel	KG	480		
	<u>STRUCTURAL STEEL WORK CONTINUE The following is prefabricated floor pannels gratings comprising of 25 x 3mm flat bars at 50mm centres welded to 25x25x3mm (s275) angle frames as per engineers drawing</u>				
H	1500mm x 3000mm long grating	NO	2		
J	850mm x 3000mm long grating	NO	6		
K	850mm x 850mm long grating	NO	12		
L	300mm x 850mm long steps	NO	60		
	<u>Sundries</u>				
M	250 x 250 x 8mm Plate: 4 No holes for 30mm diameter	NO	8		
N	25mm J bolt; 400mm Long; head, nut and washers	NO	16		
	<u>ROOF</u>				
	<u>Structural Steelwork : framed : one coat red-oxide primer; as described before</u>				
	<u>The following are 2 number Truss type T1;</u>				
P	60 x 40 x 4mm RHS Bottom chord	KG	65		
Q	60 x 40 x 4mm RHS Top chord	KG	90		
R	40 x 40 x 3mm SHS Internal Members	KG	55		
S	150 x 50 x 25.5 x 2mm Z - Purlins	KG	120		
T	50 x 50 x 4mm SHS Wall Plate	KG	80		
	<u>SUNDRIES</u>				
U	150 x 150 x 5mm Plate: 4 No holes	NO	8		
V	25 mm J bolt; 250mm Long; head, nut and washers	NO	16		
	TOTAL CARRIED TO COLLECTION				-

.2.7/1/2

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	BILL No. 2.7				
	OBSERVATION TOWER				
	NINE METER HIGH TOWER				
	26 Gauge pre-painted IT4 roofing sheets				
A	Sheet laid to attain a slope of 22.5 ⁰ from horizontal.	SM	28		
B	300mm Wide ridge flashing	LM	10		
	MILD STEEL, GRADE GJ				
C	230 x 2mm thick plate fascia; curved to form groove to the edges welded onto steel rafters; one coat red oxide primer	LM	20		
	HAND RAIL				
D	900mm High Balustrade comprising of 40 x 20 x 3mm RHS top hand rail, 2 no. 20 x 20 x 2mm SHS intermediate rails, 40 x 20 x 3mm RHS vertical balusters at 750mm centre anchored in concrete, all to engineer's detail and approval	LM	81		
	PAINTING				
E	PREPARE SURFACES AND APPLY ETCHING PRIMER; apply one coat primer, one undercoat and two Gloss finishing coats; on metallic surfaces of the tower	SUM	1		
	ELECTRICAL INSTALLATIONS				
	SOLAR LIHTING				
A	320W 12V Monocrystalline solar module	NO	1		
B	Anti-theft lockable Panel frames each to house Solar modules in item above.	NO	1		
C	Solar charge controller 30A	NO	1		
D	12V/200AH Lithium Ion (or LiPO4)batteries to approved manufacture	NO	1		
E	Metallic Battery Bank box to house the batteries.	NO	1		
F	Allow for wiring between solar panels, to Charge controller, and to the batteries	ITEM	1		
G	Allow for earthing of the installation including inverter, consumer unit, to achieve earth resistance of 1 ohm (Complete with 2No copper rods, earth pit inspection manhole, earth wire, salt/charcoal dust and all accessories	ITEM	1		
H	All wiring of lighting points are to be connected complete and ready from 16A SP miniature circuit breakers, using 3x1.5mm sq. PVC-Insulated single core copper cables drawn in uPVC flush installed conduits through switches, and as per drawings.	NO	12		
	TOTAL CARRIED TO COLLECTION				-

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
BILL No. 2.7					
OBSERVATION TOWER					
NINE METER HIGH TOWER					
A	DC Pendant/fixed lamp holder with ceiling rose complete with screw tropical daylight bulbs, of no more than 5W	NO	4		
B	Weather proof luminaire, complete with holder suitable for outdoors complete with screw tropical daylight bulbs, of no more than 8W DC light	NO	4		
LIGHTNING PROTECTION SCHEME					
All items are to be supplied must meet US/EU Certification and approved by the project manager. and installed complete with all the required mounting, fixing,					
C	25mm x 3mm copper tape.	LM	30		
D	25mm x 3mm copper square test clamp.	NO	2		
E	2000mm x 15mm air rod, c/w multiple point, air terminal base, and ridge saddle.	NO	1		
F	25mm x 3mm tape clip	NO	5		
G	1200mm x 20mm solid copper earth rod, complete with driving stud and coupler, and accessories.	NO	2		
H	Approved Concrete inspection chamber.	NO	2		
I	Testing commissioning and documenting test results.	ITEM	1		
J	Production of As built drawings.	ITEM	1		
TOTAL CARRIED TO COLLECTION					-
COLLECTION					
Total brought forward from Page .2.7/1/1					-
Total brought forward from Page .2.7/1/2					-
Total brought forward from Page .2.7/1/3					-
Total brought forward from Page .2.7/1/4					-
TOTAL CARRIED TO SUMMARY					-

.2.7/1/3

KAEKEM RANGER POST

EXTERNAL WORKS

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
	<u>BILL No .2.8</u>				
	<u>EXTERNAL WORKS</u>				
	<u>EARTHWORKS</u>				
	<u>ALL PROVISIONAL</u>				
A	Allow for maintaining and upholding sides of excavation: clear off all fallen material, rubbish	ITEM	1		
B	Allow for keeping the whole of the excavation free from general water	ITEM	1		
C	Mass excavation to reduce levels, remove from site.	CM	1080		
D	Extra over for excavation in rock, remove from site.	CM	50		
	<u>FILLING</u>				
E	Selected approved excavated material to fill make up levels; well rolled and compacted in layers of 250mm to 95% Modified AASHTO to project manager's approval	CM	220		
	<u>DRAINAGE</u>				
F	Drain size 800mm Wide (Bottom), 1200mm wide (Top) (Internal) x 800mm average (depth varies to slope) open drain; comprising 200mm Thick masonry stone walls ad base bedded and jointed with in cement sand mortar with approved water proofing additive: 100mm thick class 20 precast concrete coping; including all formwork, excavation and disposal : as per engineer's detailed drawing	lm	180		
	<u>PARKING</u>				
G	Excavate to reduce levels, remove from site.	CM	18		
H	Approved stabilized marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	15		
	<u>Road Kerb</u>				
J	Battered road kerb 150 x 305mm bedded in cement mortar (1:3) on and including 350 x 150mm plain concrete Grade '20' bed with haunching one side to engineers' detail and including all necessary excavation and disposal.	lm	25		
	<u>Walkways</u>				
K	Excavate to reduce levels, remove from site.	CM	10		
L	Approved marram fill to make up levels; well rolled and compacted to 95% MDD to Engineer's approval	CM	8		
	<u>Selected stone filling</u>				
M	Select well cut stone average diameter 400mm x 50mm thickness and place is walkway to architect detail and approval	SM	80		
	TOTAL CARRIED TO COLLECTION				-

.2.8/1/1

Item	Description	Unit	Qty	Rate (Ugx)	Amount (Ugx)
A	<p>Hand Rail 900mm high Composite Galvanised Iron(G.I) Hand Rail (balustrade) comprising of; 50mm diameter x 3mm circular hollow section (CHS) G.I horizontal top rail; 50mm diameter x 3mm CHS G.I vertical members at 2.40 metres centres , 50mm x 3mm tees and bend on each vertical member with one end rugged and cast into grade 25 concrete (150x 300x 300mm wide footings) for a depth of approximately 200mm; including preparing and applying one primer coat and spraying two finishing coats of approved oil based paint, excavations and formwork, all to the engineer's detail and approval.</p> <p>TOTAL CARRIED TO COLLECTION</p> <p>COLLECTION</p> <p>Total brought forward from Page .2.8/1/1</p> <p>Total brought forward from Page .2.8/1/2</p>	lm	120		-
TOTAL CARRIED TO SUMMARY					-

.2.8/1/2