



**Kenya Marine Fisheries Socioeconomic
Development Project (KEMFSED)
P.O. Box 58187-00200
NAIROBI**



**MINISTRY OF AGRICULTURE, LIVESTOCK,
FISHERIES AND COOPERATIVES**

Request for Bids Works

Procurement of:

**Construction of Fisheries Headquarters –
“UVUVI HOUSE”**

Employer: State Department for Fisheries, Aquaculture and
the Blue Economy
Project: Kenya Marine Fisheries Socio-Economic
Development Project (KEMFSED)
Contract Title: Construction of Fisheries Headquarters – “UVUVI
HOUSE”
Country: Republic of Kenya
Loan No./Credit No./Grant No.: 6540-KE
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VOLUME 2 OF 4: BILL OF QUANTITIES

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A. PREAMBLE

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Particular Conditions, Technical Specifications, and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and prices bid in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional Plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
6. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which no instruction will be required from the Engineer.
8. The method of measurement of completed work for payment shall be Admeasurement in accordance with ICE Conditions of Contract measurement clauses.¹

¹ The method of measurement should be spelled out precisely in the Preamble to the Bill of Quantities, describing for example the allowances (if any) for timbering in excavation, etc. Many national standard reference guides have been prepared on the subject, and one such guide is the Standard Method of Measurement of the U.K. Institution of Civil Engineers.

B. WORK ITEMS

1. The Bill of Quantities contains the following part Bills, which have been grouped according to the nature or timing of the work:

Bill No. 1: PARTICULAR PRELIMINARIES
BILL NO. 2 : GENERAL PRELIMINARIES
BILL NO. 3: SUBSTRUCTURES- BASEMENT
BILL NO. 4 : BASEMENT STAIRS AND RAMPS
BILL NO. 5 : BASEMENT WORKS
BILL NO. 6: GROUND FLOOR
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BILL NO. 20: SIGNAGE
BILL NO. 21 : CIVIL WORKS & PARKING
BILL NO. 22: DAYWORKS
BILL NO. 23: ESMP
SECTION 24: ELECTRICAL INSTALLATIONS
SECTION 25: FIRE ALARM DETECTION & PUBLIC
SECTION 26 : LIFTS INSTALLATIONS
SECTION 27 : GENERATOR INSTALLATIONS
SECTION 28: PLUMBING & DRAINAGE
SECTION 29 : HVAC
SECTION 30: BOREHOLE DRILLING AND EQUIPPING
SECTION 31: ELECTRICAL WORKS

2. Bidders shall price the Bill of Quantities in local currency only and shall indicate in the Appendix to Bid the percentage expected for payment in foreign currency or currencies.

DAYWORK SCHEDULE

General

1. Reference should be made to Sub-Clause 13.5 of the General Conditions. Work shall not be executed on a daywork basis except by written order of the Engineer. Bidders shall enter basic rates for daywork items in the Schedules, which rates shall apply to any quantity of daywork ordered by the Engineer. Nominal quantities have been indicated against each item of daywork, and the extended total for Daywork shall be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for daywork shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

Daywork Labour

2. In calculating payments due to the Contractor for the execution of daywork, the hours for labour will be reckoned from the time of arrival of the labour at the job site to execute the particular item of daywork to the time of return to the original place of departure, but excluding meal breaks and rest periods. Only the time of classes of labour directly doing work ordered by the Engineer and for which they are competent to perform will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
3. The Contractor shall be entitled to payment in respect of the total time that labour is employed on daywork, calculated at the basic rates entered by the Contractor in the Schedule of Daywork Rates:
 1. Labour, together with an additional percentage payment on basic rates representing the Contractor's profit, overheads, etc., as described below:
 - a) The basic rates for labour shall cover all direct costs to the Contractor, including (but not limited to) the amount of wages paid to such labour, transportation time, overtime, subsistence allowances, and any sums paid to or on behalf of such labour for social benefits in accordance with [country of Borrower]Kenya law. The basic rates will be payable in local currency only.
 - b) The additional percentage payment to be quoted by the bidder and applied to costs incurred under (a) above shall be deemed to cover the Contractor's profit, overheads, superintendence, liabilities, and insurances and allowances to labour, timekeeping, and clerical and office work, the use of consumable stores, water, lighting, and power; the use and repair of stagings, scaffolding, workshops, and stores, portable power tools, manual plant, and tools; supervision by the Contractor's staff, foremen, and other supervisory personnel; and charges incidental to the foregoing. Payments under this item shall be made in local currency.

Daywork Materials

4. The Contractor shall be entitled to payment in respect of materials used for daywork (except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore), at the basic rates entered by the Contractor in the Schedule of Daywork Rates: 2. Materials, together with an additional percentage payment on the basic rates to cover overhead charges and profit, as follows:
 - a) the basic rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc., and shall provide for delivery to store for stockpiling at the Site. The basic rates shall be stated in local currency, but payment will be made in the currency or currencies expended upon presentation of supporting documentation.
 - b) the additional percentage payment shall be quoted by the bidder and applied to the equivalent local currency payments made under (a) above. Payments under this item will be made in local currency.
 - c) the cost of hauling materials for use on work ordered to be carried out as daywork from the store or stockpile on the Site to the place where it is to be used will be paid in accordance with the terms for Labour and Construction in this schedule.

Daywork Contractor's Equipment

5. The Contractor shall be entitled to payments in respect of Contractor's Equipment already on Site and employed on daywork at the basic rental rates entered by the Contractor in the Schedule of Daywork Rates: **3. Contractor's Equipment.** Said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity, and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, the cost of drivers, operators, and assistants and all overhead, profit, and administrative costs related to the use of such equipment.
6. In calculating the payment due to the Contractor for Contractor's Equipment employed on daywork, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the travelling time from the part of the Site where the Contractor's Equipment was located when ordered by the Engineer to be employed on daywork and the time for return journey thereto shall be included for payment.
7. The basic rental rates for Contractor's Equipment employed on daywork shall be stated in local currency, but payments to the Contractor will be made in local currency.

1. BILL NO. 1: PARTICULAR PRELIMINARIES

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 1 : PARTICULAR PRELIMINARIES				
1.1.1	LABOUR CAMPS The contractor shall be allowed to house labour on site to the approval of the Engineer . The contractor to make arrangements to transport additional labour not housed on site to and from site on a daily basis.	Item	1		
1.1.2	CONTRACTOR'S OFFICES AND SHEDS The contractor shall set up to the approval of the Engineer a temporary office accommodation and ample temporary watertight sheds in the premise for his own use and the use of Sub-contractors for the proper storage and protection of materials vulnerable to theft, weather and remove when ordered.	Item	1		
1.1.3	TEMPORARY STRUCTURES The contractor shall allow for providing and clearing away on completion of the works such temporary hoarding , rubbish chutes, gates, planked walkways, guard rails etc. as may be necessary for the protection of the workers, the general public, and for the proper execution of the works. As such, temporary structures shall be constructed with the approval of the Engineer and to his full satisfaction and in such a manner as to cause minimum inciseness and disturbance to occupants of adjacent building, entry and exit to the existing building and users of the adjacent roads. All such temporary structures shall comply in all aspects with the national laws, rules, and regulations currently in force and applicable to such structures. All temporary structures shall be erected in a manner that the unloading of materials causes minimum obstruction to the use of adjacent roads and other facilities All temporary structures shall be kept properly lighted throughout the periods of darkness and any corners or projections shall be painted white. Temporary structures shall not be used or permitted to be used for advertisement purposes except with the consent of the Engineer All temporary structures shall be maintained at all times in good order and good condition to the satisfaction of the Engineer All temporary structures shall be removed when so required by the Engineer or at the end of the period for which it is required The Contractor shall indemnify and shall keep the employer indemnified against any expenses, loss, claim or suits arising				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<p>out of or in connection with the temporary structures. The Contractor shall pay all local authority or other charges payable in connection with temporary structures</p> <p>Carried to Collection</p>	Item	1	Ksh	-
1.1.4	<p>TEMPORARY HOARDING AND CATCHMENTS SHUTTERING AROUND WORKING AREAS</p> <p>Temporary hoarding shall be provided all around the site. The tenderers amount for hoarding shall be deemed to be inclusive of all legally demandable fees for the temporary hoarding by the Local and Central Authorities. The layout and details of the hoarding has been attached and shall include the following:-</p> <p>1. The hoarding shall be overall 3000mm high constructed in new prepainted gauge 28 galvanised box profile IT5 sheets mounted on steel framing and adequately supported by steel props, bearers and brackets at appropriate centres with 1500mm street shed roof on both sides finished with prepainted gauge 25 galvanised box profile IT5 roofing sheets on steel support including gutters, downpipes, protection road Kerbs, bollards all to the entire satisfaction and approval of the Engineer.(approximately 350 L.M @.....) - Contractor to insert rate and extend</p> <p>Vehicular and pedestrian gates shall be provided.</p> <p>2. The external surfaces of the hoarding will be primed and painted with undercoat and one finishing coat gloss oil plant.</p> <p>3. Advertisements on the hoarding will only be allowed with the express approval of the Engineer.</p> <p>The Contractor shall allow for thoroughly maintaining the hoarding and gates throughout the contract and clearing away and making good disturbed ground on completion. All materials arising will remain the property of the Contractor and he should allow credit against this.</p> <p>Carried to Collection</p>	LM	350	Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
1.1.5	PROJECT SITE OFFICE The Contractor shall provide through Constructing a site office where directed on site and as designed by the Engineer. He shall maintain the temporary office for the sole use of the Employer, Consultants and Clerk of Works. He shall provide, erect and maintain a western type water closet for the sole use of the above users, including making temporary connections to drain where applicable to the satisfaction of the Government and Medical Officers of Health and shall pay all conservancy charges and keep both office and closet in a clean and sanitary condition and dismantle and make good disturbed surfaces to the satisfaction of the Engineer on completion of the works. The office and closet shall be completed before the Contractor is permitted to commence the Works. (Approximate area of the office space 300 square metres) - as per attached drawing	Item	1		-
1.1.6	SITE OFFICE FURNITURE Complete set of 20 pax Conference table and matching conference chairs, 6No 1.8 x 1.8m L shaped desk with drawers, 14No 1.8m x 800mm wide rectangular desk with drawers, 20No Ergonomic desk chairs, 20No Visitor chairs, 12No 1.0m x 0.6m x 1.8m high wall cabinet shelves with lockable storage tables with 2 seater matching seats. The office to come complete with necessary office equipment and safety gear for consultants, site measurement tools, site camera, printing and photocopying machines as directed by the Engineer.	Item	1		
1.1.7	FACTORY VISIT Provide a provisional sum of Kenya shillings eight million for 1 No. factory/shop visits abroad to verify and approve materials to be incorporated in the works. Allow for Contractor's profits and overheads (.....%)	Item	1		
	Carried to Collection			Ksh	-
	Bill No. 1				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PARTICULAR PRELIMINARIES				
	<u>BILL SUMMARY- PARTICULAR PRELIMINARIES</u>				
			Page No.		
	Total Brought Forward from Page No.		1/1		-
			1/2		-
			1/3		-
	Carried to Final Summary			Ksh	-
	Bill No. 1 PARTICULAR PRELIMINARIES				

2. BILL NO. 2 : GENERAL PRELIMINARIES

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 2 : GENERAL PRELIMINARIES				
2.1.1	SAMPLES The contractor shall furnish at the earliest possible opportunity before work commences any samples of materials or workmanship that may be called for by the Engineer for his approval or rejection until such samples are approved to be the minimum standard for the work to which they apply. The Contractor shall ensure their protection against theft, loss or damage.	Item	1		
2.1.2	EXISTING SERVICES Prior to commencement of any work the contractor is to ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, water pipes and all other services in the area and he shall make whatever provisions may be required by the authorities concerned for the support and protection of such services. Any damage or disturbances caused to any service shall be reported immediately to the Engineer and the relevant Authority and shall be made good to their satisfaction at the contractor's expense. Through temporary interference with existing sewer or any drains, whether for the purpose of diverting, lifting, laying or making connections, the Contractor shall at his own expense provide timber troughs, pipes or other channels and if required, pumping appliances for maintaining the flow through the respective diversions. Where removal or disconnection of such service lines is required to be carried out under the Contract, the operations must be carried out in co-ordination with the relevant Local Service Authority so as to minimize any disruption of services to the surrounding buildings and to enable them not make any precautions necessary and to make any alternative arrangement for the temporary provision of the services affected. The Contractor will further be required to provide at his own cost any temporary service lines or connections for the duration of disruption caused by such disconnections or removal. The Contractor to allow for relocation of existing services that may be required. The Contractor shall be held responsible for and shall indemnify the Employer against all losses and expenses incurred as a result of such damage and disruption of services.	Item	1		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
2.1.3	<p>MATERIALS, TOOLS, PLANT AND SCAFFOLDINGS</p> <p>All materials and workmanship used in the execution of the works shall be of the best quality and description. Any materials for the works condemned by the Engineer shall immediately be removed from the site at the Contractor's expense.</p> <p>All materials must be approved by the Engineer before they are used.</p> <p>All materials and workmanship shall unless otherwise specified or described conform to the appropriate British Standards Institution specification current at the date of tender</p> <p>The works throughout shall be executed by skilled workmen well versed in their respective trades.</p> <p>The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that they are on site when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.</p> <p>The contractor shall be responsible for the provision of all materials, hoists, Tower cranes, tackle, plant, vehicles, tools and appliances scaffolding, transport and workmen required for the works except in so far as may be stated otherwise herein and he shall allow for the provision of the foregoing</p> <p>The contractor shall provide, erect and maintain all temporary scaffolding, sufficiently strong and efficient for the due performance of the Works including Sub-Contractors works, provide special scaffolding as required by the Sub-Contractors, alter and adapt all scaffolding as and when required during the works and remove on completion and make good.</p> <p>No timber used for scaffolding, formwork or similar purpose shall be used afterwards in the permanent works.</p> <p>The entire project shall be covered in approved construction net as approved by NMS, NEMA and NCA.</p> <p>The Contractor shall allow for all costs related to hoisting his or his Sub-Contractor's materials for fixing at any level within the limits shown on the drawings or included in the general description of the works.</p> <p>Carried to Collection</p>	Item	1		
				Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
2.1.5	<p>All such plant, tools and scaffolding shall comply with all regulations whether general or local in force throughout the period of the contract and shall be required as may be necessary to comply with any amendments in or additions to such regulations</p> <p>LOCAL REGULATIONS AND BY-LAWS</p> <p>The contractor is to comply with all local regulations and by-laws of the Local Authority including serving notices and paying of fees.</p> <p>In addition to complying with the Factories act (Cap 514) and the Factories Amendment act (1990), the contractor shall comply in all aspects with the above mentioned rules.</p> <p>The contractor will be held responsible for serving on the chief inspector of factories a written notice not later than seven days after the beginning of the building operations included in this contract stating the particulars required.</p>	Item	1		
2.1.6	<p>GOVERNMENT ACTS AND REGULATIONS, STATUTORY LEVIES</p> <p>The contractor is to comply with all government acts and regulations including serving notices and paying of fees. The tender price must include for all costs arising or resulting from compliance with any Act, Order or Regulation. such as Standard Levy, Capacity Building Levy under Public Procurement and Disposal Act and all costs arising or resulting from any Law requiring payment by the Contractor of any Statutory Levy or Levies currently in force</p> <p>The Contractor shall be required to indemnify the Employer for any claims arising out of non- compliance with the above requirements.</p>	Item	1		
2.1.7	<p>SECURITY OF WORKS</p> <p>The contractor shall be entirely responsible and shall pay security of all works, stores, materials, plant, personnel etc both his own and sub-contractors and shall also provide all necessary watching, lighting, and other precautions as necessary to ensure the security, the safety and protection of the public.</p>	Item	1		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
2.1.8	PUBLIC, PRIVATE ROADS AND PAVEMENTS ETC The contractor will be required to make good at his own expense any damages he may cause to the present approach road surfaces, pavements, paths, storm water channels, fences etc during the period of the works to the satisfaction of the Local and other competent Authority and the Engineer.	Item	1		
2.1.9	POLICE REGULATIONS AND TRAFFIC ARRANGEMENTS The contractor is to allow for complying with all Government Acts, orders or regulations in connection with employment of labour and other matters related to the execution of the works. The contractor must acquaint himself duly with current acts and regulations, including police regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc.. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc and allow accordingly in his tender. The Contractor will be required to agree the access route to the site with the Employer and relevant statutory authorities before commencement of the Contract Works and must adhere to this route throughout the course of the Contract, unless agreed otherwise. The Contractor will also be required to observe certain traffic rules and regulations pertaining to the use by his vehicles of the roads adjacent to the site. These rules and regulations should be investigated by him at the commencement of the Contract.	Item	1		
2.1.10	PERFORMANCE SECURITY The Contractor shall find and submit the name of one surety who shall be an approved Kenyan Bank and who will be bound to: THE STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY in an amount equal to Ten per cent (10%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the Engineer and who will when and if called upon sign a Bond to that effect without the addition of any limitations.	Item	1		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Ksh)	Amount (Ksh)
2.1.11	<p>WATER FOR THE WORKS</p> <p>The contractor shall provide at his own risk and cost all water for use in connection with the works including the work of sub-contractors and shall make arrangements with the local authority or water suppliers for the installation of a separate meter for all water used by him throughout the contract and pay all costs and fees in connection therewith. He shall also provide temporary storage tanks and tubing etc as he may consider necessary and clear away at completion or when no longer required.</p> <p>All water shall be fresh, clean and pure, free from earthly vegetable or organic matter, acid or alkaline substance in solution or suspension and shall be tested whenever required by the Engineer.</p> <p>No claims for lack of water or water pressure will however be entertained.</p>	Item	1		
2.1.12	<p>LIGHTING AND POWER</p> <p>The contractor shall provide at his own risk and cost all temporary artificial lighting and power for use on the works including all sub-contractors and specialists requirements and including all temporary connections, wiring, fittings etc and clearing away on completion. The Contractor shall pay all fees, bills and obtain all permits in connection therewith without charge to subcontractors.</p> <p>No claims due to lack of electricity or due to power fluctuations will be accepted</p>	Item	1		
2.1.13	<p>MATERIAL TEST</p> <p>Allow for testing all installations required to be tested and provide everything necessary for this purpose and leave in perfect working order to the satisfaction of the Engineer and Local Authority.</p> <p>Allow for all expenses in connection with testing of materials as specified hereunder including the supply and preparation of materials and their packing and conveyance to an approved Materials Testing Laboratory, Laboratory charges, etc. The following tests will be measured according to the number of tests actually called for by the Engineer and carried out but unsuccessful tests will not be included in the measurement.</p> <p>Set of twenty 150 x 150 x 150mm concrete test cubes 30 sets (Provisional @ Kshs. ____ -/- each set)* *Contractor to insert rate and extend</p> <p>Any other material tests as shall be directed by the Engineer.</p>	Item	1		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
2.1.14	<p>ACCESS TO SITE AND TEMPORARY ROADS</p> <p>Means of access to the site shall be agreed with the Engineer prior to commencement of the works and the Contractor must allow for building and maintaining any temporary access roads for the transport of materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings or any other means of gaining access.</p> <p>The Contractor must also allow for keeping the existing Public Highways and Roads clean and for making good all damage to the satisfaction of the Engineer and relevant Authorities.</p> <p>Upon the completion the works the Contractor shall remove such temporary roads, temporary culverts etc and make good and reinstate all works and services disturbed to the satisfaction of the Engineer.</p>	Item	1		
2.1.15	<p>SANITATION OF THE WORKS</p> <p>The sanitation of the works shall be provided, maintained and removed on completion by the Contractor to the satisfaction of the Engineers, health department and local Authorities.</p> <p>The sanitation shall be for the use by Contractors and sub-Contractors workmen etc without charge.</p> <p>The Latrine/toilet shall be enclosed plastered and painted masonry wall, corrugated sheets roofs ,with concrete tiled floors to facilitate washing. Their location shall be agreed with the Engineers and the works shall not be commenced before the sanitary accommodation has been approved by the above mentioned authorities.</p> <p>The Contractor will be required to pay all conservancy charges and shall ensure clean daily maintenance and disinfecting of the latrines/toilet, and not less than once per week, the whole area shall be sprayed with disinfectant and any temporary drains shall be removed and all works and surfaces disturbed made good and then the whole area disinfected and left clean and free from pollution to the satisfaction of the Engineer and local authorities.</p>	Item	1		
2.1.16	<p>SAFETY, HEALTH AND WELFARE OF WORKERS</p> <p>The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement</p>				
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Ksh)	Amount (Ksh)
2.1.17	<p>In addition to complying with the requirements of the Occupational Safety & Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations.</p> <p>The Contractor will further be required to identify a Site Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site.</p> <p>The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>The Tenderers attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against this Clause either in full or in part due to any non-performance on the Contractors part of his obligations under this Clause.</p> <p>The tenderers attention is further drawn to the fact that he is required to submit with his tender a detailed write-up on how he intends to implement the above Construction Safety Plan. It should be noted that this write-up will form a heavily weighted criteria in the evaluation of the tenders.</p> <p>Adequate temporary Notices and Signs shall be posted to indicate e.g. that building operations are in progress and entry is at ones own risk or trespassers are liable to be prosecuted or such other Notices and Signs as the Engineer may consider necessary from time to time. The design and location of such signs will be to the approval of the Engineer.</p>	Item	1		
	<p>SIGN BOARD</p> <p>The Contractor shall provide and erect where directed and maintain during the whole period of the building operation and remove at completion one approved temporary notice board to the Engineer's standard design giving a brief description of the works and showing the names of the employer, Contractor and the consultants, with sufficient space to append the names of the sub-contractors and suppliers when known. The lettering concerning the Project information is not to be more than 50mm high.</p>	Item	1		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
2.1.18	PROTECTION OF THE WORK The Contractor shall cover up and protect from damage, including damage from inclement rainy weather, all finished work contained in these Bills of Quantities, and unfixed materials including that of Sub-Contractors liable to damage including provision of casing up, temporary roof, gutters, drains etc until the completion of the works and removal of the same when no longer required and make good any damage which may nevertheless have been done at completion free of charge to the Employer.	Item	1		
2.1.19	PREVENTION OF DISTURBANCE AND NUISANCE Tenderers should note that normal activities shall be continuing in the surrounding buildings during the construction period. Minimum disturbance by noise, dust, water or movement of vehicles, materials, labour or plant must be caused to the function of the existing adjacent buildings in the vicinity and the occupants and staff therein. The Contractor shall comply with all instructions issued by the Employer or Engineer with regard to minimizing such disturbances. The Contractor shall not directly or indirectly or otherwise by himself or through his agents cause nuisance. Should he do so he shall be directly responsible for such acts.	Item	1		
2.1.20	INSURANCE The Contractor shall insure as required in Conditions No. 30 of the Conditions of Contract and as per Section IV the Appendix to Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the Engineer either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in all respects. Thereafter the Engineer shall from time to time ascertain premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the Engineer inspection. Some of the insurances required include but not limited to: 1. Insurance for the Works 2. Insurance for Third Party 3. Insurance for Contractor's employees and workmen 4. Insurance against loss or damage of Plant, Machinery and Equipment				
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<p>5. Provide full insurance for adjacent property. Notwithstanding the above, the Contractor shall specifically take insurance for the full value of the following adjacent buildings</p> <p>a) Adjacent Labs</p> <p>Provide insurance for personal injury or death insurance.</p> <p>The Contractor shall further indemnify the Employer against all claims arising out of the execution of the Contract Works.</p>	Item	1		
2.1.21	<p>CLEANING, REMOVAL OF PLANT AND RUBBISH ETC</p> <p>The Contractor shall upon completion of the works remove and clear away all temporary buildings, scaffolding, plant, rubbish and unused materials, surplus excavated materials and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Engineer, including clearing away and making good all traces of dirt.</p>	Item	1		
2.1.22	<p>WORKS TO BE DELIVERED UP CLEAN</p> <p>Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole the buildings watertight, clean, perfect and fit for occupation to the approval of the Engineer.</p>	Item	1		
2.1.23	<p>AMBIENT AIR QUALITY AND NOISE MONITORING</p> <p>The Contractor to carry out continuous monitoring of the ambient air quality and Noise measurements as well as vibration monitoring on quarterly basis during the construction phase and this should be done at different weather and seasons to ensure that all the weather patterns are taken into consideration during the monitoring process.</p>	Item	1		
2.1.24	<p>TRAINING LEVY</p> <p>The Contractor's attention is drawn to legal notice No. 237 of October 1971 which requires payment by the Contractor for a training levy on all contracts. The Contractor is required to familiarize himself with this law and allow in the preliminaries for all costs arising or resulting therefrom.</p>	Item	1		
	<p>Carried to Collection</p>			Ksh	-
	Bill No. 2				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	GENERAL PRELIMINARIES				
	<u>BILL SUMMARY- GENERAL PRELIMINARIES</u>				
			Page No.		
	Total Brought Forward from Page No.		2/1		-
			2/2		-
			2/3		-
			2/4		-
			2/5		-
			2/6		-
			2/7		-
			2/8		-
			2/9		-
	Carried to Final Summary			Ksh	-
	Bill No. 2 GENERAL PRELIMINARIES				

3. BILL NO. 3: SUBSTRUCTURES- BASEMENT

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 3				
	ELEMENT NO 1				
	SUBSTRUCTURES- BASEMENT				
	(All Provisional)				
	Site Preparation				
3.1.1	Clear site of all bushes, shrubs, small trees, grub up roots and remove from site	m2	3,613		
	EXCAVATION AND EARTH WORKS				
3.1.2	Excavate oversite soil average 150 mm deep and cart away from site	m2	3,613		
	Bulk excavation; starting from reduced level:-				
3.1.3	Not exceeding 1.5m deep	m3	5,420		
3.1.4	Exceeding 1.5 m but not exceeding 3.0 m deep	m3	5,420		
3.1.5	Exceeding 3.3 m but not exceeding 4.5 m deep	m4	5,420		
3.1.6	Exceeding 4.5 m but not exceeding 6.0 m deep	m5	1,807		
	Extra over all kinds of excavation irrespective of depth for:-				
3.1.7	All kinds of rock	m3	5,420		
3.1.8	Trim and level sides and surfaces of rock	m2	4,993		
	DISPOSAL				
	Surplus excavated materials				
3.1.9	Load and cart away surplus excavated material from site to contractors approved tipping area off site	m3	18,065		
	Backfill material				
3.1.10	Backfill approved imported material (murrum or red soil) and compacting in layers maximum 150 mm thick	m3			
3.1.11	Return, fill and ram selected excavated materials in layers maximum 150 mm thick	m3	1,084		
	Disposal of water				
3.1.12	Allow for keeping excavation free from all water including spring or running water by pumping, bailing or otherwise	Item			
	Plunking and strutting				
3.1.13	Planking and strutting to sides of all excavations : keep excavations free from all fallen materials	Item			
	FRENCH DRAIN				
	FILLING				
	Aggregate filling in making up levels				
3.1.14	Over 300mm thick; depositing loose approved aggregate to sides of basement wall maximum size of aggregate to be 20mm	m3	166		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
3.1.15	Open ended perforated UPVC french drain pipe laid to fall 1 in 200 including setting in 20mm loose aggregate surround (m/s) encased in geotextile membrane all to Engineer's approval 200mm diameter	m	552		
3.1.16	FILLING Hardcore Supply approved hardcore on site or other equal and approved base material in making up levels. Over 300mm thick; depositing and compacting in layers maximum 150 mm thick.	m3	1,084		
3.1.17	Stone or quarry dust Blinding surfaces of fill 50 mm thick	m2	3,613		
3.1.18	Lift pits Leave/Form sinking in hardcore for lift pits depth n.e 2 metres	Item			
3.1.19	Damp-proof membranes 1000 gauge damp proof membrane over blinded hardcore including 300 mm end & side laps	m2	3,613		
3.1.20	CONCRETE WORK Insitu ; mass concrete ; class 20/25mm Blinding with and including "sika dry shake" Raft foundation; average 50 mm thick	m2	3,613		
3.1.21	Insitu :class 30/20mm; Vibrated; Reinforced Raft bed Horizontal; 1500mm thick; with and including waterproofing admixture as "sika" or equal and approved; 50 mm thick top layer power float finish treated with "Mapetop N AR6" from "Mapei Construction Chemicals" or other equal and approved hardener applied to manufacturer's printed instructions	m3	5,420		
3.1.22	Shear walls 450 mm thick; generally waterproofing admixture as "sika" or equal and approved	m3	643		
3.1.23	Columns; Vertical or sloping exceeding 15 degrees from horizontal Generally	m3	394		
3.1.24	Ground Beams Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	427		
3.1.25	Lift shaft wall 450 mm thick; generally waterproofing admixture as "sika" or equal and approved	m3	91		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
3.1.26	Suspended solid ground floor slab 225 mm thick ; horizontal	m2	3,613		-
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
3.1.27	32 mm diameter	kg	32,569		
3.1.28	25 mm diameter	kg	25,334		
3.1.29	20 mm diameter	kg	56,978		
3.1.30	16 mm diameter	kg	51,148		
3.1.31	12 mm Diameter	kg	34,628		
3.1.32	8 mm Diameter	kg	44,208		
	FORMWORK TO INSITU CONCRETE Form work generally To soffits of suspended floors				
3.1.33	Generally ; horizontal	m2	3,613		
	Edges of ground floor slab				
3.1.34	150 to 225 mm wide	m	275		
	Sides ; vertical or battering				
3.1.35	Columns or the like	m2	947		
3.1.36	Vertical sides of shear walls	m2	2,412		
3.1.37	Vertical sides of raft	m2	413		
	Edges of lift wall openings				
3.1.38	Girth exceeding 375 mm but not exceeding 450 mm	m	28		
	To sides of beams				
3.1.39	Generally ; horizontal	m2	1,036		
	SUNDRY ITEMS				
	SUMP				
3.1.40	Extra over reinforced concrete floor slab for 1 No. Sump overall size 1000 mm long x 1000 mm wide; average depth of 1200 mm (internal dimensions) having 200mm thick sides and bottom in concrete class 30/20 mm) and including water proofed cement sand plaster finish and Bentonite waterproofing membrane as "mapeproof" or other equal and approved to bottom and sides; including for all necessary excavations, earthworks, formwork and concrete work	No	3		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	WATERPROOFING				
	Skin Wall				
	Natural stone fine machine dressed walling as per specifications attached:-				
3.1.41	100mm Thick skin walling	Sm	1,206		
	Works to be executed by an approved specialist				
	Supply and fix waterproofing solution as per the specifications attached:-				
3.1.42	Floors; horizontal; over 300 mm	Sm	3,613		
3.1.43	Walls; vertical; over 300 mm	Sm	1,206		
	PROTECTIVE SCREED				
	40 mm thick cement and sand (1:4) with "Sika-1" or other equal and approved integral waterproofing additive applied to manufacturer's printed instructions; to receive waterproofing				
3.1.44	Floors; horizontal; Over 300mm wide	Sm	3,613		
3.1.45	Walls; vertical; over 300 mm	Sm	1,206		
	Construction chemicals or other equal and approved				
3.1.46	Allow for providing a written guarantee of ten (10) years to the employer (effective from the date of application) for all waterproofing works measured herein in these bills from an approved sub-contracting firm	Item			
	COLUMN PROTECTION DETAIL				
3.1.47	50 mm x 50 mm x 4 mm galvanized mild steel angle with 3 No. mild steel lug cast into concrete at 400 mm centres; 1000 mm high fixed flush to column finish including approved reflective safety tape; all to Engineers detail	No.	360		
	EXPANSION JOINTS				
3.1.48	Form or leave 25 mm thick joint in 200 mm thick reinforced concrete slab (m/s) including all necessary formwork and forming holes	m	65		
3.1.49	25mm Thick "STYROPOR" or other equal and approved expansion material	m2	98		
3.1.50	25 mm x 25 mm deep " NITOSEAL MS 100 " or other equal and approved expansion joint filler in joint with 60 x 60 x 4 mm angle lugs	m	65		
	DRAINAGE				
3.1.51	Form or leave in concrete raft 200mm wide x 50mm deep channel including covering in mild steel grating; horizontal all to approval	m	275		
	Carried to Collection			Ksh	-

4. BILL NO. 4 : BASEMENT STAIRS AND RAMPS

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kes)	AMOUNT (Kes)
	BILL NO. 4 : BASEMENT STAIRS AND RAMPS				
	ELEMENT NO. 1				
	STAIRCASES AND STAIRCASE FINISHES				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm; Vibrated				
4.1.1	Steps, staircases or strings	m3	38		
4.1.2	225 mm thick concrete landings & porch	m2	120		
	REINFORCEMENT (REMEASURED)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
4.1.3	12 mm Diameter	kg	5,603		
4.1.4	10 mm Diameter	kg	4,147		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Risers of steps and staircases				
4.1.5	Girth 75mm to 150mm	m	420		
	Edges of strings of staircases				
4.1.6	Over 225mm but not exceeding 300mm wide	m	9		
	Vertical edge : suspended landing :				
4.1.7	Over 150mm but not exceeding 225mm high	m	30		
	To soffits; horizontal				
4.1.8	Landing & porch	m2	120		
	Soffits; sloping				
4.1.9	Waists of stairs and the like	m2	145		
	Waist of stairs; to profile of steps				
4.1.10	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	9		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	GLASS BALUSTRADES				
	Supply, assemble and fix 1150mm high stainless steel glazed balustrading comprising of 12mm thick toughened clear structural glass as per attached specifications:-				
4.1.11	1150 mm high to detail	m	40		
	Carried to Collection			Ksh	-

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kes)	AMOUNT (Kes)
	STAIRCASE FINISHES Supply and fix approved non-slip granito floor tiles as per specifications attached:- 8 mm thick; butt joints strait both ways; to cement and sand base (m/s) ; generally to				
4.1.12	To treads; 300 mm wide with bull nosings (rounded and double granite edges) full length slab.	m	420		
4.1.13	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide in granite	m	17		
4.1.14	To risers; 150 mm high full length slab	m	420		
4.1.15	To landing & porch; tiles to approved sizes and pattern	m2	120		
4.1.16	To edges of waists of stairs in one continuous slab cut to profile of steps	m	9		
4.1.17	Open edges of landing; 150 to 225mm; internal	m	30		
4.1.18	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	9		
4.1.19	20 mm thick x 150 mm high skirting to stairs; internal	m	10		
4.1.20	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into 25 mm thick granite slab finish (m/s)	m	420		
	BEDS OR BACKINGS Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive granite slab (m/s) to concrete or block work base; generally to				
4.1.21	Treads; 300 mm wide; internal	m	420		
4.1.22	Risers; 150 mm high; internal	m	420		
4.1.23	Landing	m2	120		
4.1.24	Open strings of staircases; 225 to 300mm; internal	m	30		
4.1.25	Open edges of landing; 150 to 225mm; internal	m	13		
4.1.26	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	9		
	Carried to Collection			Ksh	-

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kes)	AMOUNT (Kes)
4.1.27	15 mm thick one coat beds; wood floated to receive aluminium composite panels (m/s) to concrete or block work base; generally to Soffits of landing; horizontal	m2	120		
4.1.28	Soffits of stairs; sloping	m2	145		
	Carried to Collection			Ksh	-
ELEMENT NO. 2					
RAMPS AND RAMP FINISHES					
INSITU CONCRETE : REINFORCED					
Normal :class 30/20mm : Vibrated					
Ramp					
4.2.1	200 mm thick; sloping not exceeding 15 degrees from the horizontal; 50 mm thick top layer power float finish treated with "Mapetop N AR6" from "Mapei Construction Chemicals" or other equal and approved hardener applied to manufacturer's printed instructions	m2	24		
150 mm up stand RC ramp wall & insitu flower pots					
4.2.2	Generally	m2	20		
REINFORCEMENT (REMEASURED)					
T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.					
4.2.3	20 mm Diameter	kg	454		
4.2.4	12 mm Diameter	kg	860		
4.2.5	10 mm Diameter	kg	540		
FORMWORK TO INSITU CONCRETE					
Formwork generally					
Soffits; sloping not exceeding 15 degrees from the horizontal; internal; over 300 mm					
4.2.6	Generally to ramps	m2	24		
Edges of ramp					
4.2.7	Over 150mm but not exceeding 225mm wide	m	16		
To vertical or battering sides					
4.2.8	Up stand walls; vertical	m2	40		
	Carried to Collection			Ksh	-

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kes)	AMOUNT (Kes)
	RAMP FINISHES				
4.2.9	Plaster; cement, sand and lime; with "Sika-1" or other equal and approved integral waterproofing additive applied to manufacturer's printed instructions; steel trowelled; hard and smooth Soffits ;sloping not exceeding 15 degrees from the horizontal ; internal ; over 300 mm Generally to ramps	m2	24		
4.2.10	Walls; vertical;	m2	40		
4.2.11	To open edges of ramp 150mm; internal	m	16		
	BEDS OR BACKINGS				
4.2.12	Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive non-slip granite slab (m/s) to concrete base; generally to Ramp floor	m2	24		
4.2.13	Supply and fix granito tiles or other equal and approved; to approved pattern; bedding and jointing in cement mortar (1:4) grouting joints with proprietary grouting laid on cement sand bed (m/s); 25 mm thick; butt joints strait both ways; to cement and sand base (m/s) ; generally to 8 mm thick; butt joints strait both ways; to cement and sand base (m/s) ; generally to To ramp; tiles to approved sizes and pattern	m2	24		
4.2.14	20 mm thick x 150 mm high skirting to stairs; internal	m	16		
4.2.15	To Insitu Flower Pots	m2	10		
	PAINTING AND DECORATING				
4.2.16	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces of soffits ;sloping not exceeding 15 degrees from the horizontal ; internal ; over 300 mm Generally to ramps, sloping soffits	m2	24		
4.2.17	Walls; vertical; internal	m2	40		
	Carried to Collection			Ksh	-

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kes)	AMOUNT (Kes)
	Bill No. 4 BASEMENT STAIRS AND RAMPS <u>BILL SUMMARY- BASEMENT STAIRS AND RAMPS</u> Total Brought Forward from Page No.		Page No. 4/1 4/2 4/3 4/4 4/5		- - - - -
	TOTAL FOR BASEMENT -STAIRS AND RAMPS CARRIED FORWARD TO SUMMARY OF BILL NO. 4			Ksh	-
	Bill No. 4 BASEMENT STAIRS AND RAMPS				

5. BILL NO. 5 : BASEMENT WORKS

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kes)	AMOUNT (Kes)
5.1.1	- BILL NO. 5 : BASEMENT WORKS	m2	259	Ksh	
	- ELEMENT NO 1				
	- INTERNAL WALLING				
	BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course				-
	TOTAL FOR BASEMENT INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 5				-
5.2.1	- ELEMENT NO 2	No	5	Ksh	
	- DOORS AND ASSOCIATED FINISHES				
	ALUMINIUM DOORS Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:- Double leaf overall size 1500 mm wide x 2700 mm high comprising of 1500 x 450mm fanlight and 750 x 2250mm openable double leavesf				
	Overall size 900 mm wide x 2450 mm high with single leaf				
	FIRST QUALITY WPC DOORS Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
5.2.3	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	2		
	TOTAL FOR BASEMENT DOORS CARRIED FORWARD TO SUMMARY OF BILL NO. 5			Ksh	-
5.3.1	ELEMENT NO 3	m2	550	Ksh	
	EXTERNAL WALL FINISHES Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:- Concrete surfaces;externally				
	TOTAL FOR BASEMENT EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 5				-

ITEM	DESCRIPTION	UNIT	QTY	RATE (Ksh)	AMOUNT (Ksh)
	<u>ELEMENT NO 4</u>				
	<u>INTERNAL WALL FINISHES</u>				
	INSITU FINISHES				
5.4.1	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	1,206		
5.4.2	Ditto columns; vertical; internally	m2	947		
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	Steel trowelled plastered surfaces of wall; internally				
5.4.3	Walls; vertical; internal	m2	1,206		
5.4.4	Columns; vertical; internal	m2	947		
	TOTAL FOR BASEMENT INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 5			Ksh	-
	<u>ELEMENT NO 5</u>				
	<u>FLOOR FINISHES</u>				
	- INSITU FINISHINGS				
	EPOXY FINISH				
	Works to be executed by an approved specialist as per attached specifications:-				
	2 mm thick, 2 No coat work to concrete base (m.s); generally to parking floor				
5.5.1	Floors ; horizontal ; internal	m2	3,613		
	TOTAL FOR BASEMENT - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 5			Ksh	-

ITEM	DESCRIPTION	UNIT	QTY	RATE (Ksh)	AMOUNT (Ksh)
	<u>ELEMENT NO 6</u>				
	<u>CEILING FINISHES</u>				
	INSITU FINISHES				-
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth				
5.6.1	Ceiling; horizontal; internal	m2	3,613		
5.6.2	Beams; horizontal; Internal	m2	1,036		
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				
5.6.3	Ceilings ; girth over 300 mm ; internal	m2	3,613		
5.6.4	Beams; horizontal; Internal	m2	1,036		
	TOTAL FOR BASEMENT - CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 5			Ksh	-
	Bill No. 5 BASEMENT <u>BILL SUMMARY- BASEMENT</u>				
1	BASEMENT EXCAVATION & CONCRETE WORKS				-
2	STAIRCASE AND RAMP				-
3	INTERNAL WALLING				-
4	DOORS AND ASSOCIATED FINISHES				-
5	EXTERNAL WALL FINISHES				-
6	INTERNAL WALL FINISHES				-
7	FLOOR FINISHES				-
8	CEILING FINISHES				-
	Carried to Final Summary			Ksh	-
	Bill No. 5 BASEMENT FINISHES				

6. BILL NO. 6: GROUND FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 6: GROUND FLOOR ELEMENT NO 1 FRAME				
	INSITU CONCRETE : REINFORCED Normal; class 30/20mm : Vibrated Beams				
6.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	111		
	Down stand beams at sunshade				
6.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	22		
	Columns				
6.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	127		
	Shear walls				
6.1.4	450 mm thick	m3	178		
	Lift shaft walls				
6.1.5	450 mm thick	m3	57		
	Suspended solid floor slab				
6.1.6	225 mm thick ; horizontal	m2	1,550		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
6.1.7	Generally ; horizontal	m2	1,550		
	To edges of suspended floor slab				
6.1.8	Girth 225 mm to 300 mm	m	300		
	To vertical or battering sides				
6.1.9	Columns or the like; vertical	m2	728		
6.1.10	Shear walls/ lift walls; vertical	m2	1,044		
6.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
6.1.12	Beams or the like; Horizontal	m2	887		
6.1.13	Down stand beams; horizontal	m2	168		
	Edges of lift wall openings				
6.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				-
6.1.15	32 mm diameter	kg	5,442		
6.1.16	25 mm diameter	kg	8,971		
6.1.17	20 mm diameter	kg	12,393		
6.1.18	16 mm diameter	kg	21,660		
6.1.19	12 mm Diameter	kg	8,684		
6.1.20	10 mm Diameter	kg	8,268		
6.1.21	8 mm Diameter	kg	32,634		
	Carried to Collection			Ksh	-
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No. 6/1 6/2		
	TOTAL FOR GROUND FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-
	ELEMENT NO 2 STAIRCASES AND STAIRCASE FINISHES INSITU CONCRETE : REINFORCED Normal; class 30/20mm; Vibrated				
6.2.1	Steps, staircases or strings	m3	30		
6.2.2	225 mm thick concrete landings	m2	112		
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
6.2.3	12 mm Diameter	kg	4,130		
6.2.4	10 mm Diameter	kg	2,321		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
6.2.5	Risers of steps and staircases Girth 75m m to 150mm	m	360		
6.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	70		
6.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	130		
6.2.8	To soffits; horizontal Landing	m2	112		
6.2.9	Soffits; sloping Waists of stairs and the like	m2	120		
6.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	70		
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
6.2.11	1000 mm high to detail	m	70		
6.2.12	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets.	m	70		
	STAIRCASE FINISHES				
	Supply and fix granito tiles or other equal and approved; to approved pattern; bedding and jointing in cement mortar (1:4) grouting joints with proprietary grouting laid on cement sand bed (m/s); 25 mm thick; butt joints strait both ways; to cement and sand base (m/s) ; generally to				
6.2.13	To treads; 300 mm wide with bull nosings and 3 no. non-slip grooves	m	360		
6.2.14	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	59		
6.2.15	To risers; 170 mm high full length slab	m	360		
6.2.16	To landing; tiles to approved sizes and pattern	m2	112		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
6.2.17	To edges of waists of stairs cut to profile of steps	m	70		
6.2.18	Open edges of landing; 150 to 225mm; internal	m	60		
6.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	70		
6.2.20	150 mm high skirting to stairs	m	130		
6.2.21	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles BEDS OR BACKINGS Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to	m	360		
6.2.22	Treads; 300 mm wide; internal	m	360		
6.2.23	Risers; 170 mm high; internal	m	360		
6.2.24	Landing	m2	112		
6.2.25	Open strings of staircases; 225 to 300mm; internal	m	70		
6.2.26	Open edges of landing; 150 to 225mm; internal	m	60		
6.2.27	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	70		
6.2.28	150 mm high skirting to stairs INSITU FINISHES Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;	m	130		
6.2.29	Soffits of stairs; sloping Over 300mm girth; internal	m2	120		
6.2.30	Soffits of landing; horizontal Over 300mm girth; internal	m2	112		
6.2.31	To open edges of landing Girth 150 to 225mm; internal	m	60		
6.2.32	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	70		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				
6.2.33	Soffits of stairs; sloping Over 300mm girth; internal	m2	120		
6.2.34	Soffits of landing; horizontal Over 300mm girth; internal	m2	112		
6.2.35	To open edges of landing Girth 150 to 225mm; internal	m	60		
6.2.36	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	70		
	Carried to Collection			Ksh	-
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No. 6/3		-
			6/4		-
	TOTAL FOR GROUND FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
6.3.1	<u>ELEMENT NO 3</u>				
	<u>INTERNAL WALLING</u>				
	BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	1,364		
	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	452		
	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	80		
6.3.4	<u>INTERNAL PARTITIONING</u>				
	ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery	m2	32		
	TOTAL FOR GROUND FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-
6.4.1	<u>ELEMENT NO 4</u>				
	<u>EXTERNAL WALLING</u>				
	BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	160		
	TOTAL FOR GROUND FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 5</u>				
	<u>DOORS AND ASSOCIATED FINISHES</u>				
6.5.1	WPC Door frame moulded to approval 200 x 50 mm thick , rebated	m	427		
6.5.2	WPC Door Architraves 75 x 25 mm moulded	m	427		
6.5.3	WPC Door Quadrants 50 x 25 mm	m	427		
	PURPOSE MADE MILD STEEL UNITS Mild steel double door comprising of upper fixed panel 1800 x 450 mm high as per specifications attached:-				
6.5.4	Overall size 1800 mm wide x 2700 mm high	No	1		
	ALUMINIUM DOORS Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
6.5.5	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	2		
6.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	4		
6.5.7	Overall size 900 mm wide x 2450 mm high with single leaf	No	4		
6.5.8	Double leaf double swing door overall size 2400 mm wide x 2700 mm high comprising of 2400 x 450 mm fanlight in aluminium louvres and 2400 x 2250 openable double leaves	No.	2		
	FIRST QUALITY WPC DOORS Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
6.5.9	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	2		
6.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	24		
6.5.11	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	12		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
6.5.12	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
6.5.13	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	3		
6.5.14	Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	4		
6.5.15	Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	5		
	FIRE DOOR 120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval. Double leaved door overall size 1800 mm wide x 2700 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing				
6.5.16		No	5		
6.5.17	Ditto 900 mm wide x 2700 mm high ACOUSTIC DOOR 30 decibels rated acoustic door as "ASTURMADI" with fireproof frames, frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder ;galvanised steel stiffeners and finished in polyester powder coating; including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval. Double leaved door overall size 1800 mm wide x 2700 mm high	No	2		
6.5.18		No	2		
6.5.19	Ditto 900 mm wide x 2700 mm high FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate,accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval Double door; Overall size 1800 x 2700mm high	No	1		
6.5.20		No	2		
6.5.21	Double door; Overall size 2000 x 2700mm high	No	6		
	Carried to Collection			Ksh	-
					-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	IRONMONGERY				
	Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
6.5.22	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	90		
6.5.23	32x600mm high satin stainless steel straight pull handles back to back to approval	No	15		
6.5.24	Stainless steel AbbloY handles on Rose	No	40		
6.5.25	19x225mm high S.S conceal fix pull handles	No	40		
6.5.26	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	20		
6.5.27	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	25		
6.5.28	Satin Nickel 70mm Euro restricted Double cylinder	No	25		
6.5.29	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	25		
6.5.30	Oval satin nickel floor mounted door stop fixed with screw to approval	No	40		
6.5.31	800 x 200mm high stainless steel kick plate	No	60		
6.5.32	Satin steel Euro profile escutcheons	No	25		
6.5.33	Assa AbbloY Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	30		
6.5.34	Coat and hat hook with rubber tip in stainless steel finish	No	22		
6.5.35	Indicator bolts	No.	24		
	PAINTING AND DECORATING				
	One coat primer red oxide colour; one undercoat crown 'solo' ultra undercoat and two finishing coats colour to approval all to crown paint or other equal and approved				
	Metal surfaces				
6.5.36	Over 300 mm ; Internally	m2	15		
6.5.37	Over 300 mm ; externally	m2	15		
	Carried to Collection			Ksh	-
					-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:-				
	Wood surfaces; before fixing				
6.5.38	Door frame; 200 mm to 300 mm	m	427		
6.5.39	Architraves girth not exceeding 100 mm	m	427		
6.5.40	Quadrants/Beading girth not exceeding 100 mm	m	148		
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved				
	Wood surfaces				
6.5.41	Door frame; 200 mm to 300 mm	m	427		
6.5.42	Architraves girth not exceeding 100 mm	m	427		
6.5.43	Quadrants/beading girth not exceeding 100 mm	m	148		
6.5.44	General surfaces of wood	m2	76		
					-
	Carried to Collection			Ksh	-
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No.		
			6/7		-
			6/8		-
			6/9		-
			6/10		-
	TOTAL FOR GROUND FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
6.6.1	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS				
	Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	25		
6.6.2	Window overall size 2100 x 2700 mm high ditto	No	17		
	TOTAL FOR GROUND FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-
6.7.1	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	METALWORK				
	GLASS BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1250mm high purpose made curved glazed balcony railing comprising of 12mm thick laminated glass as per attached specifications:-				
6.7.1	1250 mm high to detail	m	45		
6.7.2	3mm thick x 60mm Diameter oval stainless steel tube handrail fixed with stainless steel brackets	m	45		
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
6.7.3	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	160		
6.7.4	Ditto concrete surfaces	m2	472		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
6.7.5	Prepare and apply granular acrylic finish as "Marmoran" from Galaxy Paints or other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	300		
6.7.6	CURTAIN WALLING Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:- Curtain walling generally; diagonal sections; curved to profile	m2	80		
6.7.7	Curtain walling generally; irrespective of shape	m2	20		
6.7.8	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval. Window size 975 x 1050 mm high	No	2		
6.7.9	Window size 890 x 1050 mm high	No	2		
6.7.10	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally	m2	268		
6.7.11	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paint or other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	204		
6.7.12	Block wall surfaces; vertical; Externally	m2	160		
	Carried to Collection			Ksh	-
	EXTERNAL WALL FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 6/11		-
			6/12		-
	TOTAL FOR GROUND FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 8				
	INTERNAL WALL FINISHES				
	INSITU FINISHES				
6.8.1	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	3,158		
6.8.2	Ditto columns; vertical; internally	m2	1,772		
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
6.8.3	12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally Walls; vertical; internal	m2	634		
	TILE, SLAB OR BLOCK FINISHINGS				
6.8.4	Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout 6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to Walls; vertical; internal	m2	634		
6.8.5	Extra over for 100 mm wide decorative tile to approval	m	150		
6.8.6	Brushed stainless steel edging strip to corners of granito walls	m	200		
6.8.7	Supply and fix granite slab as described; machine cut; to approved pattern, sizes and colours; mechanically anchored; with chamfered edging (grooved jointing) fixed to cement sand backing (m.s to Engineers detail and approval 20 mm thick; butt joints straight both ways Walls; vertical; external	m2	18		
	PAINTING AND DECORATING				
6.8.8	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally Walls; vertical; internal	m2	3,158		
6.8.9	Columns; vertical; internal	m2	1,772		
	TOTAL FOR GROUND FLOOR INTERNAL WALL FINISHES				
	CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 9</u>				
	<u>FLOOR FINISHES</u>				
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
6.9.1	30 mm thick one coat beds; wood floated; to concrete or block work base; generally to Floors; horizontal; internal; receive granito tiles	m2	2,400		
	<u>WATERPROOFING</u>				
	<i>Works to be executed by an approved specialist</i>				
6.9.2	Supply and fix waterproofing solution as per the specifications attached:- Over 300mm wide; on flat surface	m2	126		
6.9.3	Supply and fix approved 15 mm thick polypropylene carpet with "Wilton" backing carpet, laid with regular underfelt on cement screed; appropriate edge trims with approved adhesive complete with naplocks, all accessories, angle nap locks for cable outlets all fitted to manufacturers instructions and carrying a ten year warranty Floors; level; internal;	m2	2,400		
	TOTAL FOR GROUND FLOOR -FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-
	<u>ELEMENT NO 10</u>				
	<u>CEILING FINISHES</u>				
	GYPSUM PLASTERBOARD				
6.10.1	12mm Thick gypsum plasterboard fixed with screws to galvanised light weight steel frame work suspended from concrete above with mild steel angle sections , perimeter channels, primary support channels , strap hangers connecting clips etc with joints skimmed with gypsum plaster including forming and curved cuttings Horizontal ceiling ; internal	m2	680		
6.10.2	Extra over plasterboard ceiling for forming profiled extensively bulkheads and for recessed light fitting to approval	m	200		
6.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	10		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid complete with white perimeter and curved trims and wall angles as necessary; all to Engineer's details and approval. (Rate to include all necessary supports, battens and accessories)				
6.10.4	Horizontal ceiling ; internal	m2	600		
6.10.5	Extra over acoustic ceiling for forming profiled extensively bulkheads and for recessed light fitting to approval	m	100		
	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth				
6.10.6	Ceiling; horizontal; internal	m2	50		
6.10.7	Beams; horizontal; Internal	m2	50		
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
6.10.8	To steel trowelled plastered surfaces Ceilings ; girth over 300 mm ; internal	m2	50		
6.10.9	Beams; horizontal; Internal	m2	50		
6.10.10	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal	m2	680		
6.10.11	ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:- Butt joints; over 300mm wide	m2	270		
6.10.12	Ditto perforated for backlighting	m2	20		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 6/14		-
			6/15		-
	TOTAL FOR GROUND FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-
	ELEMENT NO 11				
	FITTINGS				
	VANITIES				
6.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	6		
	Supply and fix 20 mm thick granite slab fixed to concrete top				
6.11.2	Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges, providing adhesive and making good	m2	18		
	TOTAL FOR GROUND FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 6			Ksh	-

7. BILL NO. 7: FIRST FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Bill No. 7: First Floor				
	Element No 1				
	Frame				
	Insitu Concrete : Reinforced				
	Normal; Class 40/20mm : Vibrated				
	Post Tensioned Beams				
7.1.1	Beams; Horizontal Or Sloping Not Exceeding 15 Degrees From Horizontal	M3	25		
	Normal; Class 30/20mm : Vibrated				
	Beams				
7.1.2	Beams; Horizontal Or Sloping Not Exceeding 15 Degrees From Horizontal	M3	122		
	Down Stand Beams At Sunshade				
7.1.3	Beams; Horizontal Or Sloping Not Exceeding 15 Degrees From Horizontal	M3	48		
	Columns				
7.1.4	Columns; Vertical Or Sloping Exceeding 15 Degrees From Horizontal	M3	94		
	Shear Walls				
7.1.5	450 Mm Thick	M3	164		
	Lift Shaft Walls				
7.1.6	450 Mm Thick	M3	67		
	Suspended Solid Floor Slab				
7.1.7	225 Mm Thick ; Horizontal	M2	2,460		
	Auditorium Steps				
7.1.8	Steps, Staircases Or Strings	M3	245		
	Formwork To Insitu Concrete				
	Formwork Generally				
	Risers Of Auditorium Steps And Staircases				
7.1.9	Over 225mm But Not Exceeding 300mm Wide	M2	468		
	Edges Of Strings Of Staircases				
7.1.10	Over 225mm But Not Exceeding 300mm Wide	M	60		
	Soffits; Sloping				
7.1.11	Waists Of Stairs And The Like	M2	504		
	Formwork To Insitu Concrete				
	Formwork Generally				
	Soffits Of Solid Floors				
7.1.12	200 Mm Thick ; Horizontal	M2	2,460		
	To Edges Of Suspended Floor Slab				
7.1.13	Girth 150 Mm To 225 Mm	M	300		
	To Vertical Or Battering Sides				
7.1.14	Columns Or The Like; Vertical	M2	624		
7.1.15	Shear Walls/ Lift Walls; Vertical	M2	1,024		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
7.1.16	Ditto But To Curved Surfaces To Required Radii	M2	50		
7.1.17	To Sides And Soffits Beams Or The Like; Horizontal	M2	977		
7.1.18	Down Stand Beams; Horizontal	M2	231		
7.1.19	Edges Of Lift Wall Openings Girth Exceeding 375 Mm But Not Exceeding 450 Mm	M	33		
7.1.20	Reinforcement (Provisional) T-Bars; Deformed Steel Ribbed Reinforcement Bars; B.S. 4449 Including Bends, Hooks, Tying Wire, Distance Blocks, And Spacers. 32 Mm Diameter	Kg	9,663		
7.1.21	25 Mm Diameter	Kg	8,971		
7.1.22	20 Mm Diameter	Kg	12,393		
7.1.23	16 Mm Diameter	Kg	43,320		
7.1.24	12 Mm Diameter	Kg	26,052		
7.1.25	10 Mm Diameter	Kg	11,024		
7.1.26	8 Mm Diameter	Kg	25,634		
7.1.27	Supply, Fix And Post Tension 20 No. Strands Of 16 Mm Diameter Bars To Strength Directed By Structural Engineer; C/W Hoisting , Post Tensioned Duct, Anchors And All Necessary Accessories <u>Steel Work</u> <u>All Steel Work Shall Be Primed With One Coat Red Oxide Primer Before Fixing And Touched Up After Fixing. Prices Shall Include Cost Of Steel Members, Assembling, Fixing In Position And All Associated Gusset Plates, Bolts And Welding. All Welded Joints Shall Be 6 Mm Thick Continuous Fillet Weld</u>	Lm	1,056		
7.1.28	100 X 100 X 4 Mm Thick Shs Bracings	Lm	1,400		
7.1.29	200 X 200 X 6 Mm Thick Shs In Beam ; Encased In Concrete Surround (M.S) Carried To Collection	Lm	480	Ksh	-
	Frame Collection Page				
	Total Brought Forward From Page No.		Page No. 7/1		
	Total For First Floor Frame Carried Forward To Summary Of Bill No. 7		7/2	Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Element No 2				
	Staircases And Staircase Finishes				
	Insitu Concrete : Reinforced				
	Normal; Class 30/20mm; Vibrated				
7.2.1	Steps, Staircases Or Strings	M3	30		
7.2.2	225 Mm Thick Concrete Landings	M2	112		
	Reinforcement (Provisional)				
	T-Bars; Deformed Steel Ribbed Reinforcement Bars; B.S. 4449 Including Bends, Hooks, Tying Wire, Distance Blocks, And Spacers.				
7.2.3	12 Mm Diameter	Kg	4,130		
7.2.4	10 Mm Diameter	Kg	2,321		
	Formwork To Insitu Concrete				
	Formwork Generally				
	Risers Of Steps And Staircases				
7.2.5	Girth 75m M To 150mm	M	360		
	Edges Of Strings Of Staircases				
7.2.6	Over 225mm But Not Exceeding 300mm Wide	M	70		
	Vertical Edge : Suspended Landing :				
7.2.7	Over 150mm But Not Exceeding 225mm High	M	130		
	To Soffits; Horizontal				
7.2.8	Landing	M2	112		
	Soffits; Sloping				
7.2.9	Waists Of Stairs And The Like	M2	120		
	Waist Of Stairs; To Profile Of Steps				
7.2.10	To Edges Of Waists Of Stairs Cut To Profile Of Steps - 350 Mm Wide Extreme	M	70		
	Metal Work				
	Balustrades				
	Rolled Plates, Bars, Sections And Tubes				
	Supply, Assemble And Fix 1000mm High Purpose Made				
	Stainless Steel (Grade 3.1.6) Balustrading Comprising Of				
	5no 2mm Thick X 25mm Diameter Stainless Steel				
	Horizontal Rails And 3mm Thick X 75mm Diameter Oval				
	Stainless Steel Handrail Tube All Fixed To 50mm X 12mm				
	Thick Stainless Steel Double Flat Bar Vertical Support At				
	1025mm Centres Fixed To Floor Including 200mm X				
	150mm X 15mm Thick Stainless Steel Base Plate; Including				
	Fixing Supports Into Concrete And Making Good All				
	Disturbed Surfaces All As Per Engineer's Detailed Drawings				
	And Approval				
7.2.11	1000 Mm High To Detail	M	70		
7.2.12	3mm Thick X 50 Mm Diameter Mild Steel Tube Handrail Fixed To Wall/Column With Stainless Steel Brackets.	M	70		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Staircase Finishes				
	Supply And Fix Granito Tiles Or Other Equal And Approved; To Approved Pattern; Bedding And Jointing In Cement Mortar (1:4) Grouting Joints With Proprietary Grouting Laid On Cement Sand Bed (M/S); 25 Mm Thick; Butt Joints Strait Both Ways; To Cement And Sand Base (M/S) ; Generally To				
7.2.13	To Treads; 300 Mm Wide With Bull Nosings	M	468		
7.2.14	Extra Over Treads For 2 No. Water Drip On Either Sides Of Every Step Each 150 Mm Long X 300 Mm Wide To Match	M	80		
7.2.15	Ditto 1200 Mm Wide In Auditorium Steps	M2	432		
7.2.16	To Risers; 150 Mm High	M	468		
7.2.17	Ditto 150 Mm High In Auditorium Steps	M	108		
7.2.18	Ditto 300 Mm High In Auditorium Steps	M	360		
7.2.19	To Landing; Tiles To Approved Sizes And Pattern	M2	112		
7.2.20	To Edges Of Waists Of Stairs Cut To Profile Of Steps - 350 Mm Wide Extreme	M	130		
7.2.21	Open Edges Of Landing; 150 To 225mm; Internal	M	60		
7.2.21	150 Mm High Skirting To Stairs	M	130		
7.2.22	Extra; 3 No.5 Mm Wide X 3 Mm Deep Anti Slip Grooves Cut Into Granito Tiles	M	900		
	Beds Or Backings				
	Screed ; Cement Sand Backing (1:4)				
	15 Mm Thick One Coat Beds; Wood Floated To Receive Granito Tiles (M/S) To Concrete Or Block Work Base; Generally To				
7.2.23	Treads; 300 Mm Wide; Internal	M	468		
7.2.24	Treads; 1200 Mm Wide; Internal In Auditorium Steps	M2	432		
7.2.25	Risers; 150 Mm High; Internal	M	468		
	15 Mm Thick One Coat Beds; Wood Floated To Receive Granito Tiles (M/S) To Concrete Or Block Work Base; Generally To				
7.2.26	Risers; 150 Mm High; Internal In Auditorium Steps	M	108		
7.2.27	Risers; 300 Mm High; Internal In Auditorium Steps	M	360		
7.2.28	Landing	M2	112		
7.2.29	Open Strings Of Staircases; 225 To 300mm; Internal	M	130		
7.2.30	Open Edges Of Landing; 150 To 225mm; Internal	M	360		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
7.2.31	150 Mm High Skirting To Stairs	M	130		
7.2.32	To Edges Of Waists Of Stairs Cut To Profile Of Steps - 350 Mm Wide Extreme	M	130		
	Insitu Finishes				
	Lime Plaster ; Cement And Sand (1:4) ; Steel Trowelled ;				
	Hard And Smooth 20mm Thick 2 No Coat Work ; To				
	Concrete Or Block Work Base (M/S) Generally To;				
	Soffits Of Stairs; Sloping				
7.2.33	Over 300mm Girth; Internal	M2	624		
	Soffits Of Landing; Horizontal				
7.2.34	Over 300mm Girth; Internal	M2	112		
	To Open Edges Of Landing				
7.2.35	Girth 150 To 225mm; Internal	M	50		
	To Open String Of Staircase				
7.2.36	Open Strings Of Staircases; 225 To 300mm; Internal	M	190		
	Painting And Decorating				
	One Coat Crown 'Solo' Or Other Equal And Approved				
	Undercoat Including Skimming Surfaces To Smoothen				
	Them Using Approved Filler And Sanding To Smooth				
	Surface; Two Coats Crown 'Solo' Or Other Equal And				
	Approved Pure Satin Emulsion; Approved Colour; Applied				
	In Accordance With Manufacturer's Printed Instruction				
	To Steel Trowelled Plastered Surfaces				
	Soffits Of Stairs; Sloping				
7.2.37	Over 300mm Girth; Internal	M2	624		
	Soffits Of Landing; Horizontal				
7.2.38	Over 300mm Girth; Internal	M2	112		
	To Open Edges Of Landing				
7.2.39	Girth 150 To 225mm; Internal	M	50		
	To Open String Of Staircase				
7.2.40	Open Strings Of Staircases; 225 To 300mm; Internal	M	190		
	Carried To Collection			Ksh	-
	Frame Collection Page				
	Total Brought Forward From Page No.				
	Total For First Floor Staircase And Staircase Finishes				
	Carried Forward To Summary Of Bill No. 7			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>Element No 3</u>				
	- <u>Internal Walling</u>				
	Blockwork				
	Concrete Hollow Block ; B.S 2028 ; 7 N Per Square				
	Milimeter In Cement Sand Mortar (1:3)				
7.3.1	200 Mm Thick; Reinforced With Hoop Iron Gauge 20 S.W In Every Alternative Course	M2	800		
7.3.2	150 Mm Thick; Reinforced With Hoop Iron Gauge 20 S.W In Every Alternative Course	M2	120		
7.3.3	100 Mm Thick; Reinforced With Hoop Iron Gauge 20 S.W In Every Alternative Course	M2	80		
	<u>Internal Partitioning</u>				
	Aluminium Framed Partitioning				
	Supply, Assemble And Fix 2400 Mm High Purpose Made Matt Powder Coated Finish Aluminium Partitions				
	Comprising 3 Mm Thick (Minimum) Approved Aluminium Sections Comprising Of 100 X 50 Mm Top & Bottom Rails				
	And 100 X 50 Mm Vertical Members At 1200 Mm Centres; Glazed With And Including 8 Mm Thick Laminated Glass				
	Including All Accessories Such As Beadings And Sub Frames, 150 Mm Wide Flashing To Seal, Rubber Gaskets And The Like: All Necessary Ironmongery	M2	19		
	Total For First Floor Internal Walling Carried Forward To Summary Of Bill No. 7			Ksh	-
	<u>Element No 4</u>				
	- <u>External Walling</u>				
	Blockwork				
	Concrete Hollow Block ; B.S 2028 ; 7 N Per Square				
	Milimeter In Cement Sand Mortar (1:3)				
7.4.1	200 Mm Thick; Reinforced With Hoop Iron Gauge 20 S.W In Every Alternative Course	M2	318		
7.4.2	150 Mm Thick; Reinforced With Hoop Iron Gauge 20 S.W In Every Alternative Course	M2	-		
7.4.3	100 Mm Thick; Reinforced With Hoop Iron Gauge 20 S.W In Every Alternative Course	M2	-		
	Total For First Floor External Walling Carried Forward To Summary Of Bill No. 7			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>Element No 5</u> <u>Doors And Associated Finishes</u>				
7.5.1	Wpc Door Frame Moulded To Approval 200 X 50 Mm Thick , Rebated	M	227		
7.5.2	Wpc Door Architraves 75 X 25 Mm Moulded	M	227		
7.5.3	Wpc Door Quadrants 50 X 25 Mm	M	227		
	Aluminium Doors Powder Coated Aluminium Framed Doors Including 4 Mm + 4 Mm Toughened Laminated Glass Fabricated As Per Attached Specifications:- Single Leaf Door Overall Size 900 Mm Wide X 2700 Mm High Comprising Of 900x 450mm Fanlight And 900 X 2250mm Openable Single Leaf	No	5		
7.5.4	Ditto Overall Size 1800 Mm Wide X 2700 Mm High Comprising Of 1800x 450mm Fanlight And 800 X 2250mm Openable Single Leaf	No	3		
7.5.5	Overall Size 900 Mm Wide X 2450 Mm High With Single Leaf	No	2		
7.5.6	Double Leaf Double Swing Door Overall Size 2400 Mm Wide X 2700 Mm High Comprising Of 2400 X 450 Mm Fanlight In Aluminium Louvres And 2400 X 2250 Openable Double Leaves	No.	1		
	First Quality Wpc Doors Solid Core Wpc Doors; All Sides Finished With 4mm Thick Wpc Laminate Hot Pressed In Vacuum Machine Using High Quality Glue; Solid Blocking And Leaving Provision For Ironmongery Fixing. Single Door; 50 Mm Thick; Overall Size 750 Mm Wide X 2700 Mm High Comprising Of 750 X 450mm High Fanlight And 750 X 2250mm High Openable Door	No	2		
7.5.7	Ditto Overall Size 800 Mm Wide X 2400 Mm High Openable Door With 200 X 1200mm High Middle View Glass	No	8		
7.5.8	Ditto Overall Size 900 Mm Wide X 2400 Mm High Openable Door In Wcs	No	4		
7.5.9	Ditto Overall Size 800 Mm Wide X 2400 Mm High Openable Door (Duct Doors)	No	7		
7.5.10	Single Leaf Double Swing Overall Size 1000 Mm Wide X 2400 Mm High Openable Door (Pwd Wcs)	No	2		
7.5.11	Carried To Collection			Ksh	-
7.5.12					

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
7.5.13	Ditto Double Leaf Door Overall Size 1800 X 2700mm High Complete With 1800 X 300mm High Glazed Fanlight	No	4		
7.5.14	Ditto Single Leaf Door Overall Size 900 X 2700mm High Complete With 900 X 300mm High Glazed Fanlight Fire Door 120 Minutes Fire Door As " Asturmadi" Or Other Equal And Approved; With Fireproof Frames, Vision Panel And Hardware; Frames And Leaf Made Of 1.5mm Thick G.I Steel In Filled With Rockwool And Gypsum Powder And Finished In Polyester Powder Coating Including Fixing All Necessary Fireproof Ironmongery; All In Accordance To Manufacturers Printed Instructions And Engineers Approval.	No	3		
7.5.15	Double Leaved Door Overall Size 1800 Mm Wide X 2400 Mm High With View Glass Panel Overall Size 200 Mm Wide X 600 Mm High In 8 Mm Thick Clear Polished Georgian Wired Glazing	No	4		
7.5.16	Ditto 900 Mm Wide X 2700 Mm High Acoustic Door 30 Decibels Rated Acoustic Door As " Asturmadi" With Fireproof Frames, Frames And Leaf Made Of 1.5mm Thick G.I Steel In Filled With Rockwool And Gypsum Powder ;Galvanised Steel Stiffeners And Finished In Polyester Powder Coating; Including Fixing All Necessary Fireproof Ironmongery; All In Accordance To Manufacturers Printed Instructions And Engineers Approval.	No	2		
7.5.17	Double Leaved Door Overall Size 1800 Mm Wide X 2700 Mm High	No	2		
7.5.18	Ditto 900 Mm Wide X 2700 Mm High Frameless Glass Door 12mm Thick Toughened Frameless Glass Manual Sliding/ Openable Double Door; Overall Size 1800 X 2700 Mm High In 2 No. Active Leaves Each Of Size 900 X 2400 Mm High And 2 No. Fixed Light 900 X 300 Mm High Complete With And Including Soft Closing Hinges, Locks, Catches, Automatic Door Closer, Oval Satin Door Stopper, 500 Mm Long Stainless Steel Pull Handles, Stainless Steel Push/Pull Plate,Accessories, Opening Mechanism And Any Other Necessary Ironmongery All As "Assa Abloy" Or Equal And Approved To Engineer's Details And Approval	No	2		
7.5.19	Double Door; Overall Size 1800 X 2700mm High	No	1		
7.5.20	Double Door; Overall Size 2000 X 2700mm High	No	1		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Ironmongery Supply And Fix The Following Ironmongery Selected From "Union" Catalogue Issued By "Assa Abloy" Complete With Matching Screws:-				
7.5.21	150mm X 3.25mm Heavy Duty Power Load Stainless Steel Bushed Bearing Butt Hinges With Matching Screws	Pairs	60		
7.5.22	32x600mm High Satin Stainless Steel Straight Pull Handles Back To Back To Approval	No	20		
7.5.23	Stainless Steel Abloy Handles On Rose	No	45		
7.5.24	19x225mm High S.S Conceal Fix Pull Handles	No	45		
7.5.25	Stainless Steel Euro Cylinder Tesa Multi Bolt Deadlock -Case Only	No	45		
7.5.26	Stainless Steel Euro Cylinder Narrow Stile Lock Complete With Roller Catch And Cylinder	No	10		
7.5.27	Satin Nickel 70mm Euro Restricted Double Cylinder	No	15		
7.5.28	38mm Diameter Cylindrical Satin Steel Door Stop Fixed To Floor Or Wall With Screw To Approval	No	10		
7.5.29	Oval Satin Nickel Floor Mounted Door Stop Fixed With Screw To Approval	No	40		
7.5.30	800 X 200mm High Stainless Steel Kick Plate	No	30		
7.5.31	Satin Steel Euro Profile Escutcheons	No	35		
7.5.32	Assa Abloy Door Closer Pwr 4 With Sliding Rail Or Other Equal And Approved In Silver Finish	No	20		
7.5.33	Coat And Hat Hook With Rubber Tip In Stainless Steel Finish	No	10		
7.5.34	Indicator Bolts	No.	8		
	Painting And Decorating				
	One Coat Primer Red Oxide Colour; One Undercoat Crown 'Solo' Ultra Undercoat And Two Finishing Coats Colour To Approval All To Crown Paint Or Other Equal And Approved				
	Metal Surfaces				
7.5.35	Over 300 Mm ; Internally	M2	15		
7.5.36	Over 300 Mm ; Externally	M2	15		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Prepare And Apply One Coat Dura Coat Aluminium Wood Primer As Per Basco Ltd Or Other Equal And Approved On Back Of Timber Before Fixing On:-				
	Wood Surfaces; Before Fixing				
7.5.37	Door Frame; 200 Mm To 300 Mm	M	227		
7.5.38	Architraves Girth Not Exceeding 100 Mm	M	227		
7.5.39	Quadrants/Beading Girth Not Exceeding 100 Mm	M	227		
	Prepare And Apply Three Coats Dura Coat Polyurethane Wood Seal As Per Basco Ltd Or Other Equal And Approved				
	Wood Surfaces				
7.5.40	Door Frame; 200 Mm To 300 Mm	M	227		
7.5.41	Architraves Girth Not Exceeding 100 Mm	M	227		
7.5.42	Quadrants/Beading Girth Not Exceeding 100 Mm	M	227		
7.5.43	General Surfaces Of Wood	M2	40		
	Carried To Collection			Ksh	-
	Doors And Associated Finishes Collection Page				
	Total Brought Forward From Page No.		Page No. 7/7 7/8 7/9 7/10		
	Total For First Floor Doors And Associated Finishes Carried Forward To Summary Of Bill No. 7			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
7.6.1	Element No 6 Windows And Associated Finishes				
	Aluminium Purpose Made Units Supply And Fix 100 X 50 X 3 Mm (Minimum) Thick Powder Coated Top - Hung Openable Aluminium Framed Windows, Including Glazing With 8 Mm Thick Clear Glass As Per Attached Specifications:-				
	Window Overall Size 4100 X 2700 Mm High With 2 No. Equal Top Hung Openable Casement Size 2000 X 2000 Mm High And 2no Fixed Lights Size 2000 X 700mm High	No	20		
	7.6.2 Window Overall Size 2100 X 2700 Mm High Ditto	No	12		
	Total For First Floor Windows And Associated Finishes Carried Forward To Summary Of Bill No. 7			Ksh	-
7.7.1	Element No 7 External Wall Finishes				
	Metalwork Glass Balustrades Rolled Plates, Bars, Sections And Tubes Supply, Assemble And Fix 1250mm High Purpose Made Curved Glazed Balcony Railing Comprising Of 12mm Thick Laminated Glass As Per Attached Specifications:-				
	1250 Mm High To Detail	M	50		
	3mm Thick X 75mm Diameter Oval Stainless Steel Tube Handrail Fixed To Wall/Column With Stainless Steel Brackets	M	50		
	Insitu Finishes Plaster; 9 Mm (Minimum) First Coat Of Cement And Sand (1:4); 3 Mm Second Coat Of Cement And Lime Putty (1:5) Steel Floated Hard And Smooth				
7.7.3	15 Mm Thick (Minimum) 2 No. Coat Work Generally To Block Wall Surfaces; Vertical; Externally	M2	318		
7.7.4	Ditto Concrete Surfaces	M2	472		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
7.7.5	Prepare And Apply Acrylic External Quality As Crown Permacote Ultraguard Rain-Proof Silicone Paintor Other Equal And Approved Exterior Surface Paint To:- Concrete Surfaces;Externally	M2	300		
7.7.6	Curtain Walling Supply And Fix 150 X 80 Mm X 3mm Thick Powder Coated Aluminium Framed Curtain Walling; With 12mm Thick Laminated Glass As Per Attached Specifications:- Curtain Walling Generally; Diagonal Sections; Curved To Profile	M2	60		
7.7.7	Curtain Walling Generally; Irrespective Of Shape	M2	20		
7.7.8	Extra Over Curtain Walling For Aluminium Top Hung Windows Including All Necessary Ironmongery Such As Hinges And Locking Devices To Engineer's Approval. Window Size 975 X 1050 Mm High	No	2		
7.7.9	Window Size 890 X 1050 Mm High	No	2		
7.7.10	One Coat Crown 'Solo' Or Other Equal And Approved Undercoat Including Skimming Surfaces To Smoothen Them Using Approved Filler And Sanding To Smooth Surface; Approved Colour; Two Coats 'Crown Permacote Ultraguard With Silicone' Or Other Equal And Approved Pure External Quality; Approved Colour; Applied In Accordance With Manufacturer's Printed Instruction Steel Trowelled Plastered Surfaces Of Wall; Externally Concrete Surfaces;Externally	M2	268		
7.7.11	Prepare And Apply Acrylic External Quality As Crown Permacote Ultraguard Rain-Proof Silicone Paintor Other Equal And Approved Exterior Surface Paint To:- Concrete Surfaces;Externally	M2	204		
7.7.12	Block Wall Surfaces; Vertical; Externally	M2	318		
	Carried To Collection			Ksh	-
	External Wall Finishes Collection Page				
	Total Brought Forward From Page No.		Page No. 7/11		
	Total For First Floor External Wall Finishes Carried Forward To Summary Of Bill No. 7		7/12	Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Element No 8				
	Internal Wall Finishes				
	Insitu Finishes				
	Plaster; 9 Mm (Minimum) First Coat Of Cement And Sand (1:4); 3 Mm Second Coat Of Cement And Lime Putty (1:5)				
	Steel Floated Hard And Smooth				
7.8.1	12 Mm Thick (Minimum) 2 No. Coat Work Generally To Walls; Vertical; Internally	M2	1,600		
7.8.2	Ditto Columns; Vertical; Internally	M2	1,648		
	Beds Or Backings				
	Screed; Cement And Sand (1:4)				
	12 Mm Thick One Coat Backing ; Wood Floated To Receive				
	Wall Tiles (M/S) To Walls Generally (M/S) ; Internally				
7.8.3	Walls; Vertical; Internal	M2	400		
	Tile, Slab Or Block Finishings				
	Supply And Fix Approved Ceramic Wall Tiles As Described; To Approved Pattern, Sizes And Colours; Bedding And Jointing In "Pegacol " Tile Adhesive Or Other Equal And Approved; Grouting Joints With "Benfer " Or Other Equal And Approved Epoxy Resin-Based Grout				
	6 Mm Thick Butt Joints Strait Both Ways; To Cement And Sand Base (M/S) To				
7.8.4	Walls; Vertical; Internal	M2	400		
7.8.5	Extra Over For 100 Mm Wide Decorative Tile To Approval	M	60		
7.8.6	Brushed Stainless Steel Edging Strip To Corners Of Granito Walls	M	100		
	Supply And Fix Full Length Local Granite Slabs Or Other Equal And Approved Granite Slabs; To Approved Pattern; Bedding And Jointing In Approved Adhesive With Proprietary Grouting Laid On Cement Sand Bed (M/S); 20 Mm Thick; Butt Joints Straight Both Ways				
7.8.7	Walls; Vertical; External	M2	18		
	Painting And Decorating				
	One Coat Crown 'Solo' Or Other Equal And Approved Undercoat Including Skimming Surfaces To Smoothen Them Using Approved Filler And Sanding To Smooth Surface; Approved Colour; Two Coats Crown 'Solo' Or Other Equal And Approved Pure Satin Emulsion; Approved Colour; Applied In Accordance With Manufacturer's Printed Instruction				
	Steel Trowelled Plastered Surfaces Of Wall; Internally				
7.8.8	Walls; Vertical; Internal	M2	1,600		
7.8.9	Columns; Vertical; Internal	M2	1,648		
	Total For First Floor Internal Wall Finishes Carried Forward To Summary Of Bill No. 7			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>Element No 9</u> <u>Floor Finishes</u>				
7.9.1	Beds Or Backings Screed; Cement And Sand (1:4) 30 Mm Thick One Coat Beds; Wood Floated; To Concrete Or Block Work Base; Generally To Floors; Horizontal; Internal; Receive Granito Tiles	M2	1,550		
7.9.2	Waterproofing <i>Works To Be Executed By An Approved Specialist</i> Supply And Fix Waterproofing Solution As Per The Specifications Attached:- Over 300mm Wide; On Flat Surface	M2	278		
7.9.3	Granito Tiles Supply And Fix Approved Non-Slip Granito Floor Tiles As Per Attached Specifications 8 Mm Thick; Butt Joints Straight Both Ways; To Cement And Sand Base (M/S) Generally To Floors; Level; Internal;	M2	1,550		
	Total For First Floor - Floor Finishes Carried Forward To Summary Of Bill No. 7			Ksh	-
	<u>Element No 10</u> <u>Ceiling Finishes</u>				
7.10.1	Gypsum Plasterboard 12mm Thick Gypsum Plasterboard Fixed As Per Attached Specifications Horizontal Ceiling ; Internal	M2	1,185		
7.10.2	Extra Over Gypsum Ceiling For Forming Extensively Profiled Bulkheads And For Recessed Light Fitting To Approval	M2	150		
7.10.3	Cornices 150 X 25 Mm Gypsum Cornice; As Per "Classic Mouldings" Of P.O Box 23292-00603, Tel No.3874432 Or Other Equal And Approved	M	120		
7.10.4	Accoustic Ceiling Supply And Fix Approved Suspended Semi-Recessed L.I.G. Fine Fissured Acoustic Ceiling On 24mm Wide White Lay-In Grid As Per Attached Specifications Horizontal Ceiling ; Internal	M2	1,200		
7.10.5	Extra Over Acoustic Ceiling For Forming Extensively Profiled Bulkheads And For Recessed Light Fitting To Approval	M	100		
	Carried To Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Insitu Finishes				-
7.10.6	Plaster; 9 Mm (Minimum) First Coat Of Cement And Sand (1:4); 3 Mm Second Coat Of Cement And Lime Putty (1:5) Steel Trowelled Hard And Smooth Ceiling; Horizontal; Internal	M2	50		
7.10.7	Beams; Horizontal; Internal	M2	50		
	Painting And Decorating				
	One Coat Crown 'Solo' Or Other Equal And Approved Undercoat Including Skimming Surfaces To Smoothen Them Using Approved Filler And Sanding To Smooth Surface; Approved Colour; Two Coats Crown 'Solo' Or Other Equal And Approved Pure Satin Emulsion; Approved Colour; Applied In Accordance With Manufacturer's Printed Instruction				
7.10.8	To Steel Trowelled Plastered Surfaces Ceilings ; Girth Over 300 Mm ; Internal	M2	50		
7.10.9	Beams; Horizontal; Internal	M2	50		
7.10.10	One Undercoat ; Two Coats Matt Emulsion Paint ; To Crown Or Equal And Approved To Steel Trowelled Plastered Surfaces Plasterboard ; Including For Altek Filler Compound To Joints, Skimming Etc ;Girth Over 300 Mm ; Internal	M2	150		
7.10.11	Aluminium Composite Ceiling Supply And Fix Nano Self Cleansing Perforated Aluminium Composite Cladding Sheets In Panes Sizes Ranging From 400 X 400 Mm As Per Specifications Attached:-				
7.10.11	Butt Joints; Over 300mm Wide	M2	55		
7.10.12	Ditto Perforated For Backlighting	M2	20		
	Carried To Collection			Ksh	-
	Ceiling Finishes Collection Page				
	Total Brought Forward From Page No.		Page No. 7/14 7/15		
	Total For First Floor -Ceiling Finishes Carried Forward To Summary Of Bill No. 7			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Element No 11 Fittings Vanities 3000mm Long X 600mm Wide X 900mm High Worktop In 100 Mm Thick Reinforced Concrete Top With 100mm Concrete Thick Plinth; Reinforced With Brc Mesh Including Necessary Formwork And Plaster And Paint To Soffits To Approval Including 20mm Thick Melawood Wrapped Mdf Boarding In Top, Bottom, Ends, And Vertical Divisions All Blocked Together, Factory Edging; Doors And Drawers With Rounded Edges And Self Closing And Including Forming Finger Grip To Bottom Of Doors, And Supplying And Fixing Of All Necessary Ironmongery (Malpa Hinges, Brass Cabinet Knobs, Brass Magnetic Ball Catches, Drawer Soft Slide, Handles Etc) All In Accordance To Engineerural Drawings And To Engineer's Approval	No	2		
7.11.1					
	Supply And Fix 20 Mm Thick Granite Slab Fixed To Concrete Top Supply And Fix Granite Top & Splash Back Fixed To And Including Approved Adhesive Including All Necessary Rounding Of Edges, Providing Adhesive And Making Good	M2	6		
7.11.2					
	High Level Cabinets 3000mm Long X 450mm Wide X 900mm High Cabinet In 20mm Thick Melawood Wrapped Mdf Boarding In Top, Bottom, Ends, Horizontal And Vertical Divisions All Blocked Together, Factory Edging; Doors And Drawers With Rounded Edges And Self Closing And Including Forming Finger Grip To Bottom Of Doors, And Supplying And Fixing Of All Necessary Ironmongery (Malpa Hinges, Brass Cabinet Knobs, Brass Magnetic Ball Catches, Drawer Soft Slide, Handles Etc) All In Accordance To Engineerural Drawings And To Engineer's Approval	No	5		
7.11.3					
	Total For First Floor -Kitchen Worktop Carried Forward To Summary Of Bill No. 7			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Bill No. 7				
	First Floor				
	<u>Bill Summary- First Floor</u>				
1	Frame				
2	Staircase And Staircase Finishes				
3	Internal Walling				
4	External Walling				
5	Doors And Associated Finishes				
6	Windows And Associated Finishes				
7	External Wall Finishes				
8	Internal Wall Finishes				
9	Floor Finishes				
10	Ceiling Finishes				
11	Fittings				
	Carried To Final Summary			Ksh	-
	Bill No. 7				
	First Floor				

8. BILL NO. 8: SECOND FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 8: SECOND FLOOR ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
8.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	41		
	Down stand beams at sunshade				
8.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	28		
	Columns				
8.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	72		
	Shear walls				
8.1.4	450 mm thick	m3	104		
	Lift shaft walls				
8.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
8.1.6	225 mm thick ; horizontal	m2	900		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
8.1.7	200 mm thick ; horizontal	m2	900		
	To edges of suspended floor slab				
8.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
8.1.9	Columns or the like; vertical	m2	480		
8.1.10	Shear walls/ lift walls; vertical	m2	760		
8.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
8.1.12	Beams or the like; Horizontal	m2	328		
8.1.13	Down stand beams; horizontal	m2	217		
	Edges of lift wall openings				
8.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
8.1.15	32 mm diameter	kg	6,442		
8.1.16	25 mm diameter	kg	7,471		
8.1.17	20 mm diameter	kg	8,262		
8.1.18	16 mm diameter	kg	9,025		
8.1.19	12 mm Diameter	kg	13,026		
8.1.20	10 mm Diameter	kg	5,512		
8.1.21	8 mm Diameter	kg	11,634		
	Carried to Collection			Ksh	-
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 8/1 8/2		
	TOTAL FOR SECOND FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	-
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm; Vibrated				
8.2.1	Steps, staircases or strings	m3	26		
8.2.2	225 mm thick concrete landings	m2	96		
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
8.2.3	12 mm Diameter	kg	4,130		
8.2.4	10 mm Diameter	kg	2,321		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FORMWORK TO INSITU CONCRETE				-
	Formwork generally				
8.2.5	Risers of steps and staircases Girth 75m m to 150mm	m	310		
8.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	60		
8.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	100		
8.2.8	To soffits; horizontal Landing	m2	96		
8.2.9	Soffits; sloping Waists of stairs and the like	m2	105		
8.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	60		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
8.2.11	1000 mm high to detail	m	60		
8.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	60		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications				
8.2.13	1150 mm high to detail	m	5		
8.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	5		
	STAIRCASE FINISHES				
	Supply and fix granito tiles as per attached specifications:-				
8.2.15	To treads; 300 mm wide with bull nosings	m	310		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
8.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	55		
8.2.17	To risers; 150 mm high	m	310		
8.2.18	To landing; tiles to approved sizes and pattern	m2	96		
8.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	60		
8.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
8.2.21	150 mm high skirting to stairs	m	100		
8.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	310		
	BEDS OR BACKINGS				
	Screed ; Cement sand backing (1:4)				
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
8.2.23	Treads; 300 mm wide; internal	m	310		
8.2.24	Risers; 150 mm high; internal	m	310		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
8.2.25	Landing	m2	96		
8.2.26	Open strings of staircases; 225 to 300mm; internal	m	60		
8.2.27	Open edges of landing; 150 to 225mm; internal	m	60		
8.2.28	150 mm high skirting to stairs	m	100		
8.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	60		
	INSITU FINISHES				
	Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;				
	Soffits of stairs; sloping				
8.2.30	Over 300mm girth; internal	m2	105		
	Soffits of landing; horizontal				
8.2.31	Over 300mm girth; internal	m2	96		
	To open edges of landing				
8.2.32	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
8.2.33	Open strings of staircases; 225 to 300mm; internal	m	60		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces				
8.2.34	Soffits of stairs; sloping Over 300mm girth; internal	m2	105		
8.2.35	Soffits of landing; horizontal Over 300mm girth; internal	m2	96		
8.2.36	To open edges of landing Girth 150 to 225mm; internal	m	60		
8.2.37	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	60		
	Carried to Collection			Ksh	-
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No.		
			8/2		
			8/3		
			8/4		
			8/5		
	TOTAL FOR SECOND FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	-
	- <u>ELEMENT NO 3</u>				
	- <u>INTERNAL WALLING</u>				
	BLOCKWORK				
	Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
8.3.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	688		
8.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	120		
8.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	80		
	Total for Internal Walling Carried Forward				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
8.3.4	Brought Down	m2	22	Ksh	
	INTERNAL PARTITIONING ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery				
	TOTAL FOR SECOND FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 8				-
8.4.1	ELEMENT NO 4 - EXTERNAL WALLING BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	186	Ksh	
	TOTAL FOR SECOND FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 8				-
8.5.1	ELEMENT NO 5 - DOORS AND ASSOCIATED FINISHES WPC Door frame moulded to approval 200 x 50 mm thick , rebated	m	230	Ksh	
	WPC Door Architraves 75 x 25 mm moulded				
	WPC Door Quadrants 50 x 25 mm				
	Carried to Collection				-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ALUMINIUM DOORS				
	Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
8.5.4	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	6		
8.5.5	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	2		
	FIRST QUALITY WPC DOORS				
	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
8.5.6	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	2		
8.5.7	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	15		
8.5.8	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	6		
8.5.9	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
8.5.10	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
8.5.11	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	3		
8.5.12	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	4		
	FIRE DOOR				
	120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval.				
8.5.13	Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		
8.5.14	Ditto 900 mm wide x 2700 mm high	No	2		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
8.5.15	Double door; Overall size 1800 x 2700mm high	No	1		
8.5.16	Double door; Overall size 2000 x 2700mm high	No	1		
	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
8.5.17	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	45		
8.5.18	32x600mm high satin stainless steel straight pull handles back to back to approval	No	30		
8.5.19	Stainless steel Abloy handles on Rose	No	30		
8.5.20	19x225mm high S.S conceal fix pull handles	No	30		
8.5.21	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	30		
8.5.22	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
8.5.23	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
8.5.24	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	10		
8.5.25	Oval satin nickel floor mounted door stop fixed with screw to approval	No	30		
8.5.26	800 x 200mm high stainless steel kick plate	No	40		
8.5.27	Satin steel Euro profile escutcheons	No	35		
8.5.28	Assa Abloy Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	12		
8.5.29	Coat and hat hook with rubber tip in stainless steel finish	No	10		
8.5.30	Indicator bolts	No.	8		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
	Metal surfaces				
8.5.31	Over 300 mm ; Internally	m2	15		
8.5.32	Over 300 mm ; externally	m2	15		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:-				
	Wood surfaces; before fixing				
8.5.33	Door frame; 200 mm to 300 mm	m	230		
8.5.34	Architraves girth not exceeding 100 mm	m	230		
8.5.35	Quadrants/Beading girth not exceeding 100 mm	m	90		
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved				
	Wood surfaces				
8.5.36	Door frame; 200 mm to 300 mm	m	230		
8.5.37	Architraves girth not exceeding 100 mm	m	230		
8.5.38	Quadrants/beading girth not exceeding 100 mm	m	90		
8.5.39	General surfaces of wood	m2	50		
					-
	Carried to Collection			Ksh	-
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No.		
			8/6		
			8/7		
			8/8		
			8/9		
	TOTAL FOR SECOND FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
8.6.1	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	10		
	Window overall size 2100 x 2700 mm high ditto	No	5		
TOTAL FOR SECOND FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 8				Ksh	-
8.7.1	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	METALWORK				
	GLASS BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES Supply, assemble and fix 1250mm high purpose made curved glazed balcony railing comprising of 12mm thick laminated glass as per attached specifications:-				
	1250 mm high to detail	m	15		
	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	15		
8.7.3	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	186		
	Ditto concrete surfaces	m2	352		
Carried to Collection				Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
8.7.5	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paint or other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	300		
8.7.6	CURTAIN WALLING Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:- Curtain walling generally; diagonal sections; curved to profile	m2	80		
8.7.7	Curtain walling generally; irrespective of shape	m2	20		
8.7.8	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval. Window size 975 x 1050 mm high	No	2		
8.7.9	Window size 890 x 1050 mm high	No	2		
8.7.10	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally	m2	148		
8.7.11	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paint or other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	204		
8.7.12	Block wall surfaces; vertical; Externally	m2	186		
	Carried to Collection			Ksh	-
	EXTERNAL WALL FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
	TOTAL FOR SECOND FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 8				
				Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 8 INTERNAL WALL FINISHES				
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
8.8.1	12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	1,166		
8.8.2	Ditto columns; vertical; internally	m2	1,240		
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
	12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally				
8.8.3	Walls; vertical; internal	m2	610		
	TILE, SLAB OR BLOCK FINISHINGS				
	Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout				
	6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to				
8.8.4	Walls; vertical; internal	m2	610		
8.8.5	Extra over for 100 mm wide decorative tile to approval	m	110		
8.8.6	Brushed stainless steel edging strip to corners of granito walls	m	164		
	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s);				
	20 mm thick; butt joints straight both ways				
8.8.7	Walls; vertical; external	m2	18		
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	Steel trowelled plastered surfaces of wall; internally				
8.8.8	Walls; vertical; internal	m2	1,166		
8.8.9	Columns; vertical; internal	m2	1,240		
	TOTAL FOR SECOND FLOOR INTERNAL WALL FINISHES				
	CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 9</u> <u>FLOOR FINISHES</u>				
8.9.1	BEDS OR BACKINGS Screed; cement and sand (1:4) 30 mm thick one coat beds; wood floated; to concrete or block work base; generally to Floors; horizontal; internal; receive granito tiles	m2	2,460		
8.9.2	WATERPROOFING <i>Works to be executed by an approved specialist</i> Supply and fix waterproofing solution as per the specifications attached:- Over 300mm wide; on flat surface	m2	75		
8.9.3	GRANITO TILES Supply and fix approved non-slip granito floor tiles as per attached specifications 8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to Floors; level; internal;	m2	2,460		
	TOTAL FOR SECOND FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	-
	<u>ELEMENT NO 10</u> <u>CEILING FINISHES</u>				
8.10.1	GYPSUM PLASTERBOARD 12mm Thick gypsum plasterboard fixed as per attached specifications Horizontal ceiling ; internal	m2	180		
8.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	130		
8.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	100		
8.10.4	ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications Horizontal ceiling ; internal	m2	600		
8.10.5	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	100		
	Carried to Collection			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
8.10.6	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth Ceiling; horizontal; internal	m2	50		
8.10.7	Beams; horizontal; Internal	m2	50		
8.10.8	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces Ceilings ; girth over 300 mm ; internal	m2	50		
8.10.9	Beams; horizontal; Internal	m2	50		
8.10.10	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal	m2	180		
8.10.11	ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:- Butt joints; over 300mm wide	m2	100		
8.10.12	Ditto perforated for backlighting	m2	20		
	Carried to Collection			Ksh	
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 8/14 8/15		
	TOTAL FOR SECOND FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	-

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 11				
	FITTINGS				
	VANITIES				
8.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	4		
8.11.2	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	12		
8.11.3	KITCHEN WORKTOP 6000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete kitchen top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
8.11.4	Extra over for making 1 No. hole for sink size 1500 x 550 mm including necessary formwork.	No	2		
8.11.5	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	12		
	TOTAL FOR SECOND FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 8			Ksh	

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9. BILL NO. 9: THIRD FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 9: THIRD FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
9.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	39		
	Down stand beams at sunshade				
9.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	28		
	Columns				
9.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	72		
	Shear walls				
9.1.4	450 mm thick	m3	104		
	Lift shaft walls				
9.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
9.1.6	225 mm thick ; horizontal	m2	850		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
9.1.7	200 mm thick ; horizontal	m2	850		
	To edges of suspended floor slab				
9.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
9.1.9	Columns or the like; vertical	m2	480		
9.1.10	Shear walls/ lift walls; vertical	m2	760		
9.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
9.1.12	Beams or the like; Horizontal	m2	315		
9.1.13	Down stand beams; horizontal	m2	217		
	Edges of lift wall openings				
9.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
9.1.15	32 mm diameter	kg	4,842		
9.1.16	25 mm diameter	kg	8,971		
9.1.17	20 mm diameter	kg	10,741		
9.1.18	16 mm diameter	kg	7,220		
9.1.19	12 mm Diameter	kg	8,684		
9.1.20	10 mm Diameter	kg	6,890		
9.1.21	8 mm Diameter	kg	10,634		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.			Page No. 9/1	
				9/2	
	TOTAL FOR THIRD FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES INSITU CONCRETE : REINFORCED Normal; class 30/20mm; Vibrated				
9.2.1	Steps, staircases or strings	m3	18		
9.2.2	225 mm thick concrete landings	m2	64		
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
9.2.3	12 mm Diameter	kg	2,891		
9.2.4	10 mm Diameter	kg	1,857		
	Carried to Collection			Ksh	
	FORMWORK TO INSITU CONCRETE				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
9.2.5	Formwork generally Risers of steps and staircases Girth 75m m to 150mm	m	210		
9.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	42		
9.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	68		
9.2.8	To soffits; horizontal Landing	m2	64		
9.2.9	Soffits; sloping Waists of stairs and the like	m2	72		
9.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	42		
9.2.11	METAL WORK BALUSTRADES ROLLED PLATES, BARS, SECTIONS AND TUBES Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval 1000 mm high to detail	m	42		
9.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	42		
9.2.13	GLASS BALUSTRADES TO BALCONIES Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications 1150 mm high to detail	m	2		
9.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	2		
9.2.15	STAIRCASE FINISHES Supply and fix granito tiles as per attached specifications:- To treads; 300 mm wide with bull nosings	m	210		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
9.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	40		
9.2.17	To risers; 150 mm high	m	210		
9.2.18	To landing; tiles to approved sizes and pattern	m2	64		
9.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	42		
9.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
9.2.21	150 mm high skirting to stairs	m	68		
9.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	210		
	BEDS OR BACKINGS Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
9.2.23	Treads; 300 mm wide; internal	m	210		
9.2.24	Risers; 150 mm high; internal	m	210		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
9.2.25	Landing	m2	64		
9.2.26	Open strings of staircases; 225 to 300mm; internal	m	42		
9.2.27	Open edges of landing; 150 to 225mm; internal	m	42		
9.2.28	150 mm high skirting to stairs	m	68		
9.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	42		
	INSITU FINISHES Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to; Soffits of stairs; sloping				
9.2.30	Over 300mm girth; internal	m2	72		
	Soffits of landing; horizontal				
9.2.31	Over 300mm girth; internal	m2	64		
	To open edges of landing				
9.2.32	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
9.2.33	Open strings of staircases; 225 to 300mm; internal	m	60		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				
	Soffits of stairs; sloping				
9.2.34	Over 300mm girth; internal	m2	72		
	Soffits of landing; horizontal				
9.2.35	Over 300mm girth; internal	m2	64		
	To open edges of landing				
9.2.36	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
9.2.37	Open strings of staircases; 225 to 300mm; internal	m	60		
	Carried to Collection			Ksh	-
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
	TOTAL FOR THIRD FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	-
	-				
	<u>ELEMENT NO 3</u>				
	-				
	<u>INTERNAL WALLING</u>				
	BLOCKWORK				
	Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
9.3.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	376		
9.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	120		
9.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	80		
	Total for Internal Walling Carried Forward				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Brought Down				
	<u>INTERNAL PARTITIONING</u> ALUMINIUM FRAMED PARTITIONING				
9.3.4	Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery	m2	40		
	TOTAL FOR THIRD FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	
	<u>ELEMENT NO 4</u> - <u>EXTERNAL WALLING</u>				
	BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square millimeter in cement sand mortar (1:3)				
9.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	186		
9.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		
	TOTAL FOR THIRD FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	
	<u>ELEMENT NO 5</u> - <u>DOORS AND ASSOCIATED FINISHES</u>				
	WPC Door frame moulded to approval				
9.5.1	200 x 50 mm thick , rebated	m	185		
	WPC Door Architraves				
9.5.2	75 x 25 mm moulded	m	185		
	WPC Door Quadrants				
9.5.3	50 x 25 mm	m	185		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ALUMINIUM DOORS Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
9.5.4	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	20		
9.5.5	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	4		
	FIRST QUALITY WPC DOORS Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
9.5.6	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	2		
9.5.7	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	3		
9.5.8	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	8		
9.5.9	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
9.5.10	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
9.5.11	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	1		
9.5.12	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	3		
	FIRE DOOR 120 minutes Fire door as " ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval.				
9.5.13	Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		
9.5.14	Ditto 900 mm wide x 2700 mm high	No	1		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
9.5.15	Double door; Overall size 1800 x 2700mm high	No	1		
9.5.16	Double door; Overall size 2000 x 2700mm high	No	1		
	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
9.5.17	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	23		
9.5.18	32x600mm high satin stainless steel straight pull handles back to back to approval	No	15		
9.5.19	Stainless steel Abbloy handles on Rose	No	15		
9.5.20	19x225mm high S.S conceal fix pull handles	No	15		
9.5.21	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	15		
9.5.22	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
9.5.23	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
9.5.24	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	10		
9.5.25	Oval satin nickel floor mounted door stop fixed with screw to approval	No	25		
9.5.26	800 x 200mm high stainless steel kick plate	No	16		
9.5.27	Satin steel Euro profile escutcheons	No	15		
9.5.28	Assa Abbloy Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	10		
9.5.29	Coat and hat hook with rubber tip in stainless steel finish	No	8		
9.5.30	Indicator bolts	No.	8		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
9.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	8		
9.6.2	Window overall size 2100 x 2700 mm high ditto	No	3		
	TOTAL FOR THIRD FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	
	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	METALWORK GLASS BALUSTRADES ROLLED PLATES, BARS, SECTIONS AND TUBES Supply, assemble and fix 1250mm high purpose made curved glazed balcony railing comprising of 12mm thick laminated glass as per attached specifications:-				
9.7.1	1250 mm high to detail	m	15		
9.7.2	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	15		
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
9.7.3	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	186		
9.7.4	Ditto concrete surfaces	m2	176		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 8</u> <u>INTERNAL WALL FINISHES</u> INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
9.8.1	12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	542		
9.8.2	Ditto columns; vertical; internally	m2	1,240		
	BEDS OR BACKINGS Screed; cement and sand (1:4) 12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally				
9.8.3	Walls; vertical; internal	m2	610		
	TILE, SLAB OR BLOCK FINISHINGS Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout 6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to				
9.8.4	Walls; vertical; internal	m2	610		
9.8.5	Extra over for 100 mm wide decorative tile to approval	m	110		
9.8.6	Brushed stainless steel edging strip to corners of granito walls	m	164		
	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s); 20 mm thick; butt joints straight both ways				
9.8.7	Walls; vertical; external	m2	18		
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally				
9.8.8	Walls; vertical; internal	m2	542		
9.8.9	Columns; vertical; internal	m2	1,240		
	TOTAL FOR THIRD FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 9</u>				
	<u>FLOOR FINISHES</u>				
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
	30 mm thick one coat beds; wood floated; to concrete or block work base; generally to				
9.9.1	Floors; horizontal; internal; receive granito tiles	m2	750		
9.9.2	Ditto to receive APP	m2	150		
9.9.3	Ditto to receive precast concrete tiles	m2	150		
	<u>WATERPROOFING</u>				
	<i>Works to be executed by an approved specialist</i>				
	Supply and fix waterproofing solution as per the specifications attached:-				
9.9.4	Over 300mm wide; on flat surface	m2	143		
	Supply and apply Two coats of APP waterproofing membrane on screeded surface including all necessary surface preparations all in accordance with the manufacturer's printed instructions & Engineer's approval				
9.9.5	On flat surface including 200 mm end and side laps	m2	150		
	<u>GRANITO TILES</u>				
	Supply and fix approved non-slip granito floor tiles as per attached specifications				
	8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to				
9.9.6	Floors; level; internal;	m2	750		
	Supply and fix approved 25 mm thick floor precast concrete floor tiles as "KENYA BUILDERS" to approved pattern, sizes and colours; bedding and jointing in cement mortar (1:4) grouting joints with proprietary grouting laid on cement sand bed (m/s);				
9.9.7	Floors; level; internal;	m2	150		
	TOTAL FOR THIRD FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	
	<u>ELEMENT NO 10</u>				
	<u>CEILING FINISHES</u>				
	GYPSUM PLASTERBOARD				
	12mm Thick gypsum plasterboard fixed as per attached specifications				
9.10.1	Horizontal ceiling ; internal	m2	125		
9.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	130		
	Carried to Collection			Ksh	
	Cornices				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
9.10.3	150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications	m	100		
9.10.4	Horizontal ceiling ; internal	m2	450		
9.10.5	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth	m	100		
9.10.6	Ceiling; horizontal; internal	m2	50		
9.10.7	Beams; horizontal; Internal PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces	m2	50		
9.10.8	Ceilings ; girth over 300 mm ; internal	m2	50		
9.10.9	Beams; horizontal; Internal One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces	m2	50		
9.10.10	Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:-	m2	125		
9.10.11	Butt joints; over 300mm wide	m2	60		
9.10.12	Ditto perforated for backlighting	m2	15		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 9/13 9/14		
	TOTAL FOR THIRD FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	
	ELEMENT NO 11				
	FITTINGS VANITIES				
9.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
9.11.2	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	6		
	TOTAL FOR THIRD FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 9			Ksh	

[illegible]

10. BILL NO. 10: FOURTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 10: FOURTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
10.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	45		
	Down stand beams at sunshade				
10.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	25		
	Columns				
10.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	50		
	Shear walls				
10.1.4	450 mm thick	m3	104		
	Lift shaft walls				
10.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
10.1.6	225 mm thick ; horizontal	m2	975		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
10.1.7	200 mm thick ; horizontal	m2	975		
	To edges of suspended floor slab				
10.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
10.1.9	Columns or the like; vertical	m2	336		
10.1.10	Shear walls/ lift walls; vertical	m2	760		
10.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
10.1.12	Beams or the like; Horizontal	m2	360		
10.1.13	Down stand beams; horizontal	m2	196		
	Edges of lift wall openings				
10.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
10.1.15	32 mm diameter	kg	7,730		
10.1.16	25 mm diameter	kg	7,177		
10.1.17	20 mm diameter	kg	8,262		
10.1.18	16 mm diameter	kg	7,220		
10.1.19	12 mm Diameter	kg	9,368		
10.1.20	10 mm Diameter	kg	9,646		
10.1.21	8 mm Diameter	kg	9,634		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.			Page No. 10/1 10/2	
	TOTAL FOR FOURTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 10			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES INSITU CONCRETE : REINFORCED Normal; class 30/20mm; Vibrated				
10.2.1	Steps, staircases or strings	m3	18		
10.2.2	225 mm thick concrete landings	m2	64		
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
10.2.3	12 mm Diameter	kg	2,891		
10.2.4	10 mm Diameter	kg	1,857		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
10.2.5	Risers of steps and staircases Girth 75mm to 150mm	m	210		
10.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	42		
10.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	68		
10.2.8	To soffits; horizontal Landing	m ²	64		
10.2.9	Soffits; sloping Waists of stairs and the like	m ²	72		
10.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	42		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
10.2.11	1000 mm high to detail	m	42		
10.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	42		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications				
10.2.13	1150 mm high to detail	m	2		
10.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	2		
	STAIRCASE FINISHES				
	Supply and fix granito tiles as per attached specifications:-				
10.2.15	To treads; 300 mm wide with bull nosings	m	210		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
10.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	40		
10.2.17	To risers; 150 mm high	m	210		
10.2.18	To landing; tiles to approved sizes and pattern	m2	64		
10.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	42		
10.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
10.2.21	150 mm high skirting to stairs	m	68		
10.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	210		
	BEDS OR BACKINGS Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
10.2.23	Treads; 300 mm wide; internal	m	210		
10.2.24	Risers; 150 mm high; internal	m	210		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
10.2.25	Landing	m2	64		
10.2.26	Open strings of staircases; 225 to 300mm; internal	m	42		
10.2.27	Open edges of landing; 150 to 225mm; internal	m	42		
10.2.28	150 mm high skirting to stairs	m	68		
10.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	42		
	INSITU FINISHES Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to; Soffits of stairs; sloping				
10.2.30	Over 300mm girth; internal	m2	72		
	Soffits of landing; horizontal				
10.2.31	Over 300mm girth; internal	m2	64		
	To open edges of landing				
10.2.32	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
10.2.33	Open strings of staircases; 225 to 300mm; internal	m	60		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Brought Down				
10.3.4	<p><u>INTERNAL PARTITIONING</u> ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery</p> <p>TOTAL FOR FOURTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 10</p> <p><u>ELEMENT NO 4</u> - <u>EXTERNAL WALLING</u></p> <p>BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square millimeter in cement sand mortar (1:3)</p>	m2	56		
10.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	168		
10.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		
	<p>TOTAL FOR FOURTH FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 10</p> <p><u>ELEMENT NO 5</u> - <u>DOORS AND ASSOCIATED FINISHES</u></p> <p>WPC Door frame moulded to approval</p>			Ksh	
10.5.1	200 x 50 mm thick , rebated	m	145		
10.5.2	150 x 50 mm thick , rebated	m	30		
10.5.3	<p>WPC Door Architraves 75 x 25 mm moulded</p>	m	175		
10.5.4	<p>WPC Door Quadrants 50 x 25 mm</p>	m	175		
	<p>Carried to Collection ALUMINIUM DOORS</p>			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
10.5.5	Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:- Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	20		
10.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	2		
10.5.7	FIRST QUALITY WPC DOORS Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing. Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	2		
10.5.8	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	3		
10.5.9	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	8		
10.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
10.5.11	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
10.5.12	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	1		
10.5.13	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	2		
10.5.14	FIRE DOOR 120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval. Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		
10.5.15	Ditto 900 mm wide x 2700 mm high	No	1		
10.5.16	STRONG ROOM DOOR Ballistic Resistant security door as "ASTURMADI" complete with all ironmongery as per manufacturer's specifications Door size 1450 x 2800 mm high; single leaf; with 150 x 50 x 27 mm thick bullet proof glass vision panel	No	1		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
10.5.17	Double door; Overall size 1800 x 2700mm high	No	-		
10.5.18	Double door; Overall size 2000 x 2700mm high	No	1		
	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
10.5.19	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	23		
10.5.20	32x600mm high satin stainless steel straight pull handles back to back to approval	No	15		
10.5.21	Stainless steel Abbloy handles on Rose	No	15		
10.5.22	19x225mm high S.S conceal fix pull handles	No	15		
10.5.23	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	15		
10.5.24	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
10.5.25	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
10.5.26	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	10		
10.5.27	Oval satin nickel floor mounted door stop fixed with screw to approval	No	25		
10.5.28	800 x 200mm high stainless steel kick plate	No	16		
10.5.29	Satin steel Euro profile escutcheons	No	15		
10.5.30	Assa Abbloy Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	10		
10.5.31	Coat and hat hook with rubber tip in stainless steel finish	No	10		
10.5.32	Indicator bolts	No.	8		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
10.5.33	Metal surfaces Over 300 mm ; Internally	m2	15		
10.5.34	Over 300 mm ; externally	m2	15		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:-				
	Wood surfaces; before fixing				
10.5.35	Door frame; 200 mm to 300 mm	m	175		
10.5.36	Architraves girth not exceeding 100 mm	m	175		
10.5.37	Quadrants/Beading girth not exceeding 100 mm	m	55		
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved				
	Wood surfaces				
10.5.38	Door frame; 200 mm to 300 mm	m	175		
10.5.39	Architraves girth not exceeding 100 mm	m	175		
10.5.40	Quadrants/beading girth not exceeding 100 mm	m	55		
10.5.41	General surfaces of wood	m2	30		
	Carried to Collection			Ksh	
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No.		
			10/6		
			10/7		
			10/8		
			10/9		
	TOTAL FOR FOURTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 10			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
10.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	10		
10.6.2	Window overall size 2100 x 2700 mm high ditto	No	2		
	TOTAL FOR FOURTH FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 10			Ksh	
	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	METALWORK GLASS BALUSTRADES ROLLED PLATES, BARS, SECTIONS AND TUBES Supply, assemble and fix 1250mm high purpose made curved glazed balcony railing comprising of 12mm thick laminated glass as per attached specifications:-				
10.7.1	1250 mm high to detail	m	100		
10.7.2	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	100		
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
10.7.3	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	168		
10.7.4	Ditto concrete surfaces	m2	176		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
10.7.5	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paint or other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	136		
10.7.6	CURTAIN WALLING Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:- Curtain walling generally; diagonal sections; curved to profile	m2	60		
10.7.7	Curtain walling generally; irrespective of shape	m2	20		
10.7.8	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval. Window size 975 x 1050 mm high	No	2		
10.7.9	Window size 890 x 1050 mm high	No	2		
10.7.10	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally	m2	126		
10.7.11	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paint or other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	50		
10.7.12	Block wall surfaces; vertical; Externally	m2	168		
	Carried to Collection			Ksh	
	EXTERNAL WALL FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.			Page No. 10/10 10/11	
	TOTAL FOR FOURTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 10			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 8</u>				
	<u>INTERNAL WALL FINISHES</u>				
	INSITU FINISHES				
10.8.1	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	640		
10.8.2	Ditto columns; vertical; internally	m2	1,096		
	BEDS OR BACKINGS				
10.8.3	Screed; cement and sand (1:4) 12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally Walls; vertical; internal	m2	400		
	TILE, SLAB OR BLOCK FINISHINGS				
10.8.4	Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout 6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to Walls; vertical; internal	m2	400		
10.8.5	Extra over for 100 mm wide decorative tile to approval	m	110		
10.8.6	Brushed stainless steel edging strip to corners of granito walls	m	164		
10.8.7	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s); 20 mm thick; butt joints straight both ways Walls; vertical; external	m2	18		
	PAINTING AND DECORATING				
10.8.8	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally Walls; vertical; internal	m2	640		
10.8.9	Columns; vertical; internal	m2	1,096		
	TOTAL FOR FOURTH FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 10			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 9</u>				
	<u>FLOOR FINISHES</u>				
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
	30 mm thick one coat beds; wood floated; to concrete or block work base; generally to				
10.9.1	Floors; horizontal; internal; receive granito tiles	m2	690		
10.9.2	Ditto to receive APP	m2	160		
10.9.3	Ditto to receive precast concrete tiles	m2	160		
	<u>WATERPROOFING</u>				
	<i>Works to be executed by an approved specialist</i>				
	Supply and fix waterproofing solution as per the specifications attached:-				
10.9.4	Over 300mm wide; on flat surface	m2	297		
	Supply and apply Two coats of APP waterproofing membrane on screeded surface including all necessary surface preparations all in accordance with the manufacturer's printed instructions & Engineer's approval				
10.9.5	On flat surface including 200 mm end and side laps	m2	160		
	<u>GRANITO TILES</u>				
	Supply and fix approved non-slip granito floor tiles as per attached specifications				
	8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to				
10.9.6	Floors; level; internal;	m2	690		
	Supply and fix approved 25 mm thick floor precast concrete floor tiles as "KENYA BUILDERS" to approved pattern, sizes and colours; bedding and jointing in cement mortar (1:4) grouting joints with proprietary grouting laid on cement sand bed (m/s);				
10.9.7	Floors; level; internal;	m2	160		
	TOTAL FOR FOURTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 10			Ksh	
	<u>ELEMENT NO 10</u>				
	<u>CEILING FINISHES</u>				
	GYPSUM PLASTERBOARD				
	12mm Thick gypsum plasterboard fixed as per attached specifications				
10.10.1	Horizontal ceiling ; internal	m2	360		
10.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	60		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
10.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications	m	75		
10.10.4	Horizontal ceiling ; internal	m2	400		
10.10.5	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth	m	50		
10.10.6	Ceiling; horizontal; internal	m2	50		
10.10.7	Beams; horizontal; Internal PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces	m2	50		
10.10.8	Ceilings ; girth over 300 mm ; internal	m2	50		
10.10.9	Beams; horizontal; Internal One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces	m2	50		
10.10.10	Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:-	m2	410		
10.10.11	Butt joints; over 300mm wide	m2	50		
10.10.12	Ditto perforated for backlighting	m2	15		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
	TOTAL FOR FOURTH FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 10				
	ELEMENT NO 11				
	FITTINGS				
	VANITIES				
10.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
10.11.2	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	6		
10.11.3	KITCHEN WORKTOP 6000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete kitchen top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	1		
10.11.4	Extra over for making 1 No. hole for sink size 1500 x 550 mm including necessary formwork.	No	1		
10.11.5	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges, TOTAL FOR FOURTH FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 10	m2	6		

11. BILL NO. 11: FIFTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 11: FIFTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
11.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	45		
	Down stand beams at sunshade				
11.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	16		
	Columns				
11.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	29		
	Shear walls				
11.1.4	450 mm thick	m3	104		
	Lift shaft walls				
11.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
11.1.6	225 mm thick ; horizontal	m2	860		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
11.1.7	200 mm thick ; horizontal	m2	860		
	To edges of suspended floor slab				
11.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
11.1.9	Columns or the like; vertical	m2	192		
11.1.10	Shear walls/ lift walls; vertical	m2	760		
11.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
11.1.12	Beams or the like; Horizontal	m2	360		
11.1.13	Down stand beams; horizontal	m2	126		
	Edges of lift wall openings				
11.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
11.1.15	32 mm diameter	kg	5,154		
11.1.16	25 mm diameter	kg	7,177		
11.1.17	20 mm diameter	kg	8,262		
11.1.18	16 mm diameter	kg	7,220		
11.1.19	12 mm Diameter	kg	8,684		
11.1.20	10 mm Diameter	kg	8,268		
11.1.20	8 mm Diameter	kg	6,634		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No.		
			11/1		
			11/2		
	TOTAL FOR FIFTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES INSITU CONCRETE : REINFORCED Normal; class 30/20mm; Vibrated				
11.2.1	Steps, staircases or strings	m3	14		
11.2.2	225 mm thick concrete landings	m2	48		
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
11.2.3	12 mm Diameter	kg	2,065		
11.2.4	10 mm Diameter	kg	1,625		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
11.2.5	Risers of steps and staircases Girth 75mm to 150mm	m	155		
11.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	32		
11.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	52		
11.2.8	To soffits; horizontal Landing	m ²	48		
11.2.9	Soffits; sloping Waists of stairs and the like	m ²	55		
11.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
11.2.11	1000 mm high to detail	m	27		
11.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	27		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications				
11.2.13	1150 mm high to detail	m	5		
11.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	5		
	STAIRCASE FINISHES				
	Supply and fix granito tiles as per attached specifications:-				
11.2.15	To treads; 300 mm wide with bull nosings	m	155		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
11.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	30		
11.2.17	To risers; 150 mm high	m	155		
11.2.18	To landing; tiles to approved sizes and pattern	m2	48		
11.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
11.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
11.2.21	150 mm high skirting to stairs	m	52		
11.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	155		
	BEDS OR BACKINGS Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
11.2.23	Treads; 300 mm wide; internal	m	155		
11.2.24	Risers; 150 mm high; internal	m	155		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
11.2.25	Landing	m2	48		
11.2.26	Open strings of staircases; 225 to 300mm; internal	m	32		
11.2.27	Open edges of landing; 150 to 225mm; internal	m	60		
11.2.28	150 mm high skirting to stairs	m	52		
11.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	INSITU FINISHES Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;				
11.2.30	Soffits of stairs; sloping Over 300mm girth; internal	m2	55		
11.2.31	Soffits of landing; horizontal Over 300mm girth; internal	m2	48		
11.2.32	To open edges of landing Girth 150 to 225mm; internal	m	60		
11.2.33	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				
11.2.34	Soffits of stairs; sloping Over 300mm girth; internal	m2	55		
11.2.35	Soffits of landing; horizontal Over 300mm girth; internal	m2	48		
11.2.36	To open edges of landing Girth 150 to 225mm; internal	m	60		
11.2.37	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
	TOTAL FOR FIFTH FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	
	<u>ELEMENT NO 3</u>				
	<u>INTERNAL WALLING</u>				
	BLOCKWORK				
	Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
11.3.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	200		
11.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	120		
11.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	80		
	Total for Internal Walling Carried Forward				
	Brought Down				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
11.3.4	<p><u>INTERNAL PARTITIONING</u> ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery</p> <p>TOTAL FOR FIFTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 11</p>	m2	36		
	<p><u>ELEMENT NO 4</u> - <u>EXTERNAL WALLING</u></p> <p>BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square millimeter in cement sand mortar (1:3)</p>				
11.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	108		
11.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		
	<p>TOTAL FOR FIFTH FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 11</p>			Ksh	
	<p><u>ELEMENT NO 5</u> - <u>DOORS AND ASSOCIATED FINISHES</u></p>				
11.5.1	<p>WPC Door frame moulded to approval 200 x 50 mm thick , rebated</p>	m	135		
11.5.2	150 x 50 mm thick , rebated	m	15		
11.5.3	<p>WPC Door Architraves 75 x 25 mm moulded</p>	m	150		
11.5.4	<p>WPC Door Quadrants 50 x 25 mm</p>	m	150		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ALUMINIUM DOORS				
	Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
11.5.5	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	10		
11.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	3		
	FIRST QUALITY WPC DOORS				
	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
11.5.7	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	-		
11.5.8	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	3		
11.5.9	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	7		
11.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
11.5.11	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
11.5.12	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	1		
11.5.13	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	-		
	FIRE DOOR				
	120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval.				
11.5.14	Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		
11.5.15	Ditto 900 mm wide x 2700 mm high	No	1		
	STRONG ROOM DOOR				
	Ballistic Resistant security door as "ASTURMADI" complete with all ironmongery as per manufacturer's specifications				
L	Door size 1450 x 2800 mm high; single leaf; with 150 x 50 x 27 mm thick bullet proof glass vision panel	No	1		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
11.5.16	Double door; Overall size 1800 x 2700mm high	No	-		
11.5.17	Double door; Overall size 2400 x 2700mm high	No	1		
	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
11.5.18	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	30		
11.5.19	32x600mm high satin stainless steel straight pull handles back to back to approval	No	20		
11.5.20	Stainless steel Abloy handles on Rose	No	20		
11.5.21	19x225mm high S.S conceal fix pull handles	No	20		
11.5.22	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	15		
11.5.23	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
11.5.24	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
11.5.25	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	10		
11.5.26	Oval satin nickel floor mounted door stop fixed with screw to approval	No	25		
11.5.27	800 x 200mm high stainless steel kick plate	No	16		
11.5.28	Satin steel Euro profile escutcheons	No	15		
11.5.29	Assa Abloy Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	12		
11.5.30	Coat and hat hook with rubber tip in stainless steel finish	No	8		
11.5.31	Indicator bolts	No.	8		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
11.5.32	Metal surfaces Over 300 mm ; Internally	m2	15		
11.5.33	Over 300 mm ; externally	m2	15		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:-				
	Wood surfaces; before fixing				
11.5.34	Door frame; 200 mm to 300 mm	m	135		
11.5.35	Architraves girth not exceeding 100 mm	m	135		
11.5.36	Quadrants/Beading girth not exceeding 100 mm	m	55		
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved				
	Wood surfaces				
11.5.37	Door frame; 200 mm to 300 mm	m	135		
11.5.38	Architraves girth not exceeding 100 mm	m	135		
11.5.39	Quadrants/beading girth not exceeding 100 mm	m	55		
11.5.40	General surfaces of wood	m2	10		
	Carried to Collection			Ksh	
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No. 11/6		
			11/7		
			11/8		
			11/9		
	TOTAL FOR FIFTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
11.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	8		
11.6.2	Window overall size 2100 x 2700 mm high ditto	No	2		
	TOTAL FOR FIFTH FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	
	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	METALWORK GLASS BALUSTRADES ROLLED PLATES, BARS, SECTIONS AND TUBES Supply, assemble and fix 1250mm high purpose made curved glazed balcony railing comprising of 12mm thick laminated glass as per attached specifications:-				
11.7.1	1250 mm high to detail	m	75		
11.7.2	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	75		
11.7.3	1000 mm high stainless steel balustrade	m	5		
11.7.4	3mm thick x 75mm Diameter stainless steel tube	m	5		
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
11.7.5	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	108		
11.7.6	Ditto concrete surfaces	m2	176		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
11.7.7	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	136		
11.7.8	CURTAIN WALLING Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:- Curtain walling generally; diagonal sections; curved to profile	m2	60		
11.7.9	Curtain walling generally; irrespective of shape	m2	20		
11.7.10	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval. Window size 975 x 1050 mm high	No	2		
11.7.11	Window size 890 x 1050 mm high	No	2		
11.7.12	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally	m2	176		
11.7.13	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	50		
11.7.14	Block wall surfaces; vertical; Externally	m2	108		
	Carried to Collection			Ksh	
	EXTERNAL WALL FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No. 11/10		
			11/11	Ksh	
	TOTAL FOR FIFTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 8</u> <u>INTERNAL WALL FINISHES</u>				
	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
11.8.1	12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	400		
11.8.2	Ditto columns; vertical; internally	m2	952		
	BEDS OR BACKINGS Screed; cement and sand (1:4) 12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally				
11.8.3	Walls; vertical; internal	m2	400		
	TILE, SLAB OR BLOCK FINISHINGS Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout 6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to				
11.8.4	Walls; vertical; internal	m2	400		
11.8.5	Extra over for 100 mm wide decorative tile to approval	m	110		
11.8.6	Brushed stainless steel edging strip to corners of granito walls	m	164		
	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s); 20 mm thick; butt joints straight both ways				
11.8.7	Walls; vertical; external	m2	18		
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally				
11.8.8	Walls; vertical; internal	m2	400		
11.8.9	Columns; vertical; internal	m2	952		
	TOTAL FOR FIFTH FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>ELEMENT NO 9</u>				
	<u>FLOOR FINISHES</u>				
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
	30 mm thick one coat beds; wood floated; to concrete				
	or block work base; generally to				
11.9.1	Floors; horizontal; internal; receive granito tiles	m2	975		
	<u>WATERPROOFING</u>				
	<i>Works to be executed by an approved specialist</i>				
	Supply and fix waterproofing solution as per the specifications attached:-				
11.9.2	Over 300mm wide; on flat surface	m2	685		
	<u>GRANITO TILES</u>				
	Supply and fix approved non-slip granito floor tiles as per attached specifications				
	8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to				
11.9.3	Floors; level; internal;	m2	975		
	TOTAL FOR FIFTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	
	<u>ELEMENT NO 10</u>				
	<u>CEILING FINISHES</u>				
	<u>GYPSUM PLASTERBOARD</u>				
	12mm Thick gypsum plasterboard fixed as per attached specifications				
11.10.1	Horizontal ceiling ; internal	m2	348		
11.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	80		
	<u>Cornices</u>				
11.10.3	150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	75		
	<u>ACCOUSTIC CEILING</u>				
	Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications				
11.10.4	Horizontal ceiling ; internal	m2	372		
11.10.5	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	50		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth				
11.10.6	Ceiling; horizontal; internal	m2	50		
11.10.7	Beams; horizontal; Internal	m2	50		
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				
11.10.8	Ceilings ; girth over 300 mm ; internal	m2	50		
11.10.9	Beams; horizontal; Internal	m2	50		
	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces				
11.10.10	Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal	m2	348		
	ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:-				
11.10.11	Butt joints; over 300mm wide	m2	50		
11.10.12	Ditto perforated for backlighting	m2	15		
	Carried to Collection			Ksh	
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
	TOTAL FOR FIFTH FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 11				
	FITTINGS VANITIES				
11.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
11.11.2	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	6		
11.11.3	KITCHEN WORKTOP 6000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete kitchen top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	1		
11.11.4	Extra over for making 1 No. hole for sink size 1500 x 550 mm including necessary formwork.	No	1		
11.11.5	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	6		
	TOTAL FOR FIFTH FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 11			Ksh	

12. BILL NO. 12: SIXTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 12: SIXTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
12.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	42		
	Down stand beams at sunshade				
12.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	16		
	Columns				
12.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	29		
	Shear walls				
12.1.4	450 mm thick	m3	104		
	Lift shaft walls				
12.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
12.1.6	225 mm thick ; horizontal	m2	830		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
12.1.7	200 mm thick ; horizontal	m2	830		
	To edges of suspended floor slab				
12.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
12.1.9	Columns or the like; vertical	m2	192		
12.1.10	Shear walls/ lift walls; vertical	m2	760		
12.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
12.1.12	Beams or the like; Horizontal	m2	333		
12.1.13	Down stand beams; horizontal	m2	126		
	Edges of lift wall openings				
12.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
12.1.15	32 mm diameter	kg	5,154		
12.1.16	25 mm diameter	kg	7,177		
12.1.17	20 mm diameter	kg	8,262		
12.1.18	16 mm diameter	kg	7,220		
12.1.19	12 mm Diameter	kg	6,684		
12.1.20	10 mm Diameter	kg	5,512		
12.1.21	8 mm Diameter	kg	9,634		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE		Page No.		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Total Brought Forward from Page No.		12/1 12/2		
	TOTAL FOR SIXTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm; Vibrated				
12.2.1	Steps, staircases or strings	m3	14		
12.2.2	225 mm thick concrete landings	m2	48		
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
12.2.3	12 mm Diameter	kg	2,065		
12.2.4	10 mm Diameter	kg	1,625		
	Carried to Collection			Ksh	
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Risers of steps and staircases				
12.2.5	Girth 75mm to 150mm	m	155		
	Edges of strings of staircases				
12.2.6	Over 225mm but not exceeding 300mm wide	m	32		
	Vertical edge : suspended landing :				
12.2.7	Over 150mm but not exceeding 225mm high	m	52		
	To soffits; horizontal				
12.2.8	Landing	m2	48		
	Soffits; sloping				
12.2.9	Waists of stairs and the like	m2	55		
	Waist of stairs; to profile of steps				
12.2.10	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
12.2.11	1000 mm high to detail	m	28		
12.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	28		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.2.13	1150 mm high to detail	m	5		
12.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	5		
	STAIRCASE FINISHES				
12.2.15	Supply and fix granito tiles as per attached specifications:- To treads; 300 mm wide with bull nosings	m	155		
	Carried to Collection			Ksh	
12.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	30		
12.2.17	To risers; 150 mm high	m	155		
12.2.18	To landing; tiles to approved sizes and pattern	m2	48		
12.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
12.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
12.2.21	150 mm high skirting to stairs	m	52		
12.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	155		
	BEDS OR BACKINGS				
	Screed ; Cement sand backing (1:4)				
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
12.2.23	Treads; 300 mm wide; internal	m	155		
12.2.24	Risers; 150 mm high; internal	m	155		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
12.2.25	Landing	m2	48		
12.2.26	Open strings of staircases; 225 to 300mm; internal	m	32		
12.2.27	Open edges of landing; 150 to 225mm; internal	m	60		
12.2.28	150 mm high skirting to stairs	m	52		
12.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	INSITU FINISHES				
	Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;				
	Soffits of stairs; sloping				
12.2.30	Over 300mm girth; internal	m2	55		
	Soffits of landing; horizontal				
12.2.31	Over 300mm girth; internal	m2	48		
	To open edges of landing				
12.2.32	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
12.2.33	Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				
	Soffits of stairs; sloping				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.2.34	Over 300mm girth; internal Soffits of landing; horizontal	m2	55		
12.2.35	Over 300mm girth; internal To open edges of landing	m2	48		
12.2.36	Girth 150 to 225mm; internal To open string of staircase	m	60		
12.2.37	Open strings of staircases; 225 to 300mm; internal Carried to Collection	m	32		
				Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No. 12/2 12/3 12/4 12/5		
	TOTAL FOR SIXTH FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
	ELEMENT NO 3 INTERNAL WALLING BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
12.3.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	200		
12.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	120		
12.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	80		
	Total for Internal Walling Carried Forward				
	Brought Down INTERNAL PARTITIONING ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery				
12.3.4		m2	46		
	TOTAL FOR SIXTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
	ELEMENT NO 4 EXTERNAL WALLING BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
12.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	108		
12.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	TOTAL FOR SIXTH FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
	ELEMENT NO 5				
	DOORS AND ASSOCIATED FINISHES				
	WPC Door frame moulded to approval				
12.5.1	200 x 50 mm thick , rebated	m	135		
12.5.2	150 x 50 mm thick , rebated	m	15		
	WPC Door Architraves				
12.5.3	75 x 25 mm moulded	m	150		
	WPC Door Quadrants				
12.5.4	50 x 25 mm	m	150		
	Carried to Collection			Ksh	
	ALUMINIUM DOORS				
	Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
12.5.5	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	7		
12.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	3		
	FIRST QUALITY WPC DOORS				
	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
12.5.7	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	-		
12.5.8	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	3		
12.5.9	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	7		
12.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
12.5.11	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
12.5.12	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	1		
12.5.13	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	-		
	FIRE DOOR				
	120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval.				
12.5.14	Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.5.15	Ditto 900 mm wide x 2700 mm high	No	1		
	Carried to Collection			Ksh	
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
12.5.16	Double door; Overall size 1800 x 2700mm high	No	-		
12.5.17	Double door; Overall size 2400 x 2700mm high	No	1		
	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
12.5.18	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	24		
12.5.19	32x600mm high satin stainless steel straight pull handles back to back to approval	No	16		
12.5.20	Stainless steel Abbloys handles on Rose	No	16		
12.5.21	19x225mm high S.S conceal fix pull handles	No	16		
12.5.22	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	10		
12.5.23	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
12.5.24	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
12.5.25	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	16		
12.5.26	Oval satin nickel floor mounted door stop fixed with screw to approval	No	16		
12.5.27	800 x 200mm high stainless steel kick plate	No	14		
12.5.28	Satin steel Euro profile escutcheons	No	10		
12.5.29	Assa Abbloys Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	10		
12.5.30	Coat and hat hook with rubber tip in stainless steel finish	No	7		
12.5.31	Indicator bolts	No.	7		
	Carried to Collection			Ksh	
	PAINTING AND DECORATING Metal surfaces				
12.5.32	Over 300 mm ; Internally	m2	15		
12.5.33	Over 300 mm ; externally	m2	15		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:- Wood surfaces; before fixing				
12.5.34	Door frame; 200 mm to 300 mm	m	150		
12.5.35	Architraves girth not exceeding 100 mm	m	150		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.5.36	Quadrants/Beading girth not exceeding 100 mm Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved Wood surfaces	m	35		
12.5.37	Door frame; 200 mm to 300 mm	m	150		
12.5.38	Architraves girth not exceeding 100 mm	m	150		
12.5.39	Quadrants/beading girth not exceeding 100 mm	m	35		
12.5.40	General surfaces of wood	m2	20		
	Carried to Collection			Ksh	
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE		Page No.		
	Total Brought Forward from Page No.		12/6		
			12/7		
			12/8		
			12/9		
	TOTAL FOR SIXTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
	ELEMENT NO 6 WINDOWS AND ASSOCIATED FINISHES ALUMINIUM PURPOSE MADE UNITS Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
12.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	12		
12.6.2	Window overall size 2100 x 2700 mm high ditto	No	3		
	TOTAL FOR SIXTH FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
	ELEMENT NO 7 EXTERNAL WALL FINISHES INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
12.7.1	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	108		
12.7.2	Ditto concrete surfaces	m2	176		
	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-				
12.7.3	Concrete surfaces;externally	m2	136		
	CURTAIN WALLING Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:-				
12.7.4	Curtain walling generally; diagonal sections; curved to profile	m2	60		
12.7.5	Curtain walling generally; irrespective of shape	m2	20		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.7.6	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval.	No	2		
12.7.7	Window size 975 x 1050 mm high	No	2		
	Window size 890 x 1050 mm high				
	Carried to Collection			Ksh	
12.7.8	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction	m2	126		
12.7.9	Steel trowelled plastered surfaces of wall; externally	m2	50		
12.7.10	Concrete surfaces;externally	m2	108		
	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-				
	Concrete surfaces;externally				
	Block wall surfaces; vertical; Externally				
	Carried to Collection			Ksh	
	EXTERNAL WALL FINISHES COLLECTION PAGE		Page No.		
	Total Brought Forward from Page No.		12/10		
			12/11		
	TOTAL FOR SIXTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
12.8.1	<u>ELEMENT NO 8</u>				
12.8.2	<u>INTERNAL WALL FINISHES</u>				
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
	12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	420		
	Ditto columns; vertical; internally	m2	952		
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
	12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally				
	Walls; vertical; internal	m2	380		
	Total for Internal Wall Finishes Carried Forward				
	Brought Down				
	TILE, SLAB OR BLOCK FINISHINGS				
	Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.8.4	6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to Walls; vertical; internal	m2	380		
12.8.5	Extra over for 100 mm wide decorative tile to approval	m	80		
12.8.6	Brushed stainless steel edging strip to corners of granito walls	m	115		
12.8.7	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s); 20 mm thick; butt joints straight both ways Walls; vertical; external	m2	18		
12.8.8	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally	m2	420		
12.8.9	Walls; vertical; internal	m2	952		
	TOTAL FOR SIXTH FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
12.9.1	ELEMENT NO 9 FLOOR FINISHES BEDS OR BACKINGS Screed; cement and sand (1:4) 30 mm thick one coat beds; wood floated; to concrete or block work base; generally to Floors; horizontal; internal; receive granito tiles	m2	860		
12.9.2	WATERPROOFING <i>Works to be executed by an approved specialist</i> Supply and fix waterproofing solution as per the specifications attached:- Over 300mm wide; on flat surface	m2	95		
	Total for Internal Floor Finishes Carried Forward				
12.9.3	Brought Down GRANITO TILES Supply and fix approved non-slip granito floor tiles as per attached specifications 8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to Floors; level; internal;	m2	860		
	TOTAL FOR SIXTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
12.10.1	ELEMENT NO 10 CEILING FINISHES GYPSUM PLASTERBOARD 12mm Thick gypsum plasterboard fixed as per attached specifications Horizontal ceiling ; internal	m2	268		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	80		
12.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	75		
12.10.4	ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications Horizontal ceiling ; internal	m2	368		
12.10.5	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	50		
12.10.6	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth Ceiling; horizontal; internal	m2	50		
12.10.7	Beams; horizontal; Internal	m2	50		
12.10.8	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces Ceilings ; girth over 300 mm ; internal	m2	50		
12.10.9	Beams; horizontal; Internal	m2	50		
	Carried to Collection			Ksh	
12.10.10	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal	m2	268		
12.10.11	ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:- Butt joints; over 300mm wide	m2	50		
12.10.12	Ditto perforated for backlighting	m2	12		
	Carried to Collection			Ksh	
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 12/13 12/14		
	TOTAL FOR SIXTH FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
12.11.1	ELEMENT NO 11 FITTINGS VANITIES 3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
12.11.2	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	6		
	TOTAL FOR SIXTH FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 12			Ksh	
1	Bill No. 12				
2	SIXTH FLOOR				
3	BILL SUMMARY- SIXTH FLOOR				
4	FRAME				
5	STAIRCASE AND STAIRCASE FINISHES				
6	INTERNAL WALLING				
7	EXTERNAL WALLING				
8	DOORS AND ASSOCIATED FINISHES				
9	WINDOWS AND ASSOCIATED FINISHES				
10	EXTERNAL WALL FINISHES				
11	INTERNAL WALL FINISHES				
12	FLOOR FINISHES				
13	CEILING FINISHES				
14	FITTINGS				
	Carried to Final Summary			Ksh	
	Bill No. 12				
	SIXTH FLOOR				

13. BILL NO. 13: SEVENTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 13: SEVENTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
13.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	37		
	Down stand beams at sunshade				
13.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	13		
	Columns				
13.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	22		
	Shear walls				
13.1.4	450 mm thick	m3	101		
	Lift shaft walls				
13.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
13.1.6	225 mm thick ; horizontal	m2	740		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
13.1.7	200 mm thick ; horizontal	m2	740		
	To edges of suspended floor slab				
13.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
13.1.9	Columns or the like; vertical	m2	144		
13.1.10	Shear walls/ lift walls; vertical	m2	744		
13.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
13.1.12	Beams or the like; Horizontal	m2	297		
13.1.13	Down stand beams; horizontal	m2	101		
	Edges of lift wall openings				
13.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
13.1.15	32 mm diameter	kg	4,509		
13.1.16	25 mm diameter	kg	5,280		
13.1.17	20 mm diameter	kg	6,610		
13.1.18	16 mm diameter	kg	4,415		
13.1.19	12 mm Diameter	kg	7,684		
13.1.20	10 mm Diameter	kg	5,512		
13.1.21	8 mm Diameter	kg	8,534		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No.		
			13/1		
			13/2		
	TOTAL FOR SEVENTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm; Vibrated				
13.2.1	Steps, staircases or strings	m3	14		
13.2.2	225 mm thick concrete landings	m2	48		
	REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
13.2.3	12 mm Diameter	kg	2,065		
13.2.4	10 mm Diameter	kg	1,625		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
13.2.5	Risers of steps and staircases Girth 75mm to 150mm	m	155		
13.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	32		
13.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	52		
13.2.8	To soffits; horizontal Landing	m ²	48		
13.2.9	Soffits; sloping Waists of stairs and the like	m ²	55		
13.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
13.2.11	1000 mm high to detail	m	32		
13.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	32		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications				
13.2.13	1150 mm high to detail	m	5		
13.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	5		
	STAIRCASE FINISHES				
	Supply and fix granito tiles as per attached specifications:-				
13.2.15	To treads; 300 mm wide with bull nosings	m	155		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
13.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	30		
13.2.17	To risers; 150 mm high	m	155		
13.2.18	To landing; tiles to approved sizes and pattern	m2	48		
13.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
13.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
13.2.21	150 mm high skirting to stairs	m	52		
13.2.22	Extra; 3 No. 5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	155		
	BEDS OR BACKINGS				
	Screed ; Cement sand backing (1:4)				
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
13.2.23	Treads; 300 mm wide; internal	m	155		
13.2.24	Risers; 150 mm high; internal	m	155		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
13.2.25	Landing	m2	48		
13.2.26	Open strings of staircases; 225 to 300mm; internal	m	32		
13.2.27	Open edges of landing; 150 to 225mm; internal	m	60		
13.2.28	150 mm high skirting to stairs	m	52		
13.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	INSITU FINISHES				
	Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;				
	Soffits of stairs; sloping				
13.2.30	Over 300mm girth; internal	m2	55		
	Soffits of landing; horizontal				
13.2.31	Over 300mm girth; internal	m2	48		
	To open edges of landing				
13.2.32	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
13.2.33	Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
13.2.34	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces Soffits of stairs; sloping Over 300mm girth; internal	m2	55		
13.2.35	Soffits of landing; horizontal Over 300mm girth; internal	m2	48		
13.2.36	To open edges of landing Girth 150 to 225mm; internal	m	60		
13.2.37	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE Total Brought Forward from Page No.		Page No. 13/2 13/3 13/4 13/5		
	TOTAL FOR SEVENTH FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
13.3.1	<u>ELEMENT NO 3</u> <u>INTERNAL WALLING</u> BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	396		
13.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	120		
13.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	80		
	Total for Internal Walling Carried Forward				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Brought Down				
13.3.4	INTERNAL PARTITIONING ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery	m2	35		
	TOTAL FOR SEVENTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
13.4.1	ELEMENT NO 4 EXTERNAL WALLING BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	86		
13.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		
	TOTAL FOR SEVENTH FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
13.5.1	ELEMENT NO 5 - DOORS AND ASSOCIATED FINISHES WPC Door frame moulded to approval 200 x 50 mm thick , rebated	m	150		
13.5.2	150 x 50 mm thick , rebated	m	15		
13.5.3	WPC Door Architraves 75 x 25 mm moulded	m	165		
13.5.4	WPC Door Quadrants 50 x 25 mm	m	165		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
13.5.5	ALUMINIUM DOORS Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:- Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	6		
13.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	3		
13.5.7	FIRST QUALITY WPC DOORS Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing. Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	-		
13.5.8	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	3		
13.5.9	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	12		
13.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
13.5.11	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
13.5.12	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	1		
13.5.13	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	-		
13.5.14	FIRE DOOR 120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval. Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		
13.5.15	Ditto 900 mm wide x 2700 mm high	No	1		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
13.5.16	Double door; Overall size 1800 x 2700mm high	No	-		
13.5.17	Double door; Overall size 2400 x 2700mm high	No	1		
	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-				
13.5.18	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	33		
13.5.19	32x600mm high satin stainless steel straight pull handles back to back to approval	No	20		
13.5.20	Stainless steel Abloy handles on Rose	No	20		
13.5.21	19x225mm high S.S conceal fix pull handles	No	20		
13.5.22	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	15		
13.5.23	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
13.5.24	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
13.5.25	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	16		
13.5.26	Oval satin nickel floor mounted door stop fixed with screw to approval	No	16		
13.5.27	800 x 200mm high stainless steel kick plate	No	30		
13.5.28	Satin steel Euro profile escutcheons	No	15		
13.5.29	Assa Abloy Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	10		
13.5.30	Coat and hat hook with rubber tip in stainless steel finish	No	15		
13.5.31	Indicator bolts	No.	15		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	PAINTING AND DECORATING				
	Metal surfaces				
13.5.32	Over 300 mm ; Internally	m2	15		
13.5.33	Over 300 mm ; externally	m2	15		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:-				
	Wood surfaces; before fixing				
13.5.34	Door frame; 200 mm to 300 mm	m	165		
13.5.35	Architraves girth not exceeding 100 mm	m	165		
13.5.36	Quadrants/Beading girth not exceeding 100 mm	m	35		
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved				
	Wood surfaces				
13.5.37	Door frame; 200 mm to 300 mm	m	165		
13.5.38	Architraves girth not exceeding 100 mm	m	165		
13.5.39	Quadrants/beading girth not exceeding 100 mm	m	35		
13.5.40	General surfaces of wood	m2	20		
	Carried to Collection			Ksh	
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 13/6		
			13/7		
			13/8		
			13/9		
	TOTAL FOR SEVENTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS				
	Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
13.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	12		
13.6.2	Window overall size 2100 x 2700 mm high ditto	No	4		
	TOTAL FOR SEVENTH FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
13.7.1	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	86		
13.7.2	Ditto concrete surfaces	m2	176		
	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-				
13.7.3	Concrete surfaces;externally	m2	136		
	CURTAIN WALLING				
	Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:-				
13.7.4	Curtain walling generally; diagonal sections; curved to profile	m2	60		
13.7.5	Curtain walling generally; irrespective of shape	m2	20		
	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval.				
13.7.6	Window size 975 x 1050 mm high	No	2		
13.7.7	Window size 890 x 1050 mm high	No	2		
	Carried to Collection			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
13.7.8	<p>One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction</p> <p>Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally</p>	m2	126		
13.7.9	<p>Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:- Concrete surfaces;externally</p>	m2	50		
13.7.10	Block wall surfaces; vertical; Externally	m2	86		
	Carried to Collection			Ksh	
	EXTERNAL WALL FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No. 13/10 13/11		
	TOTAL FOR SEVENTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
	<u>ELEMENT NO 8</u>				
	<u>INTERNAL WALL FINISHES</u>				
	<u>INSITU FINISHES</u>				
13.8.1	<p>Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally</p>	m2	686		
13.8.2	Ditto columns; vertical; internally	m2	888		
	<u>BEDS OR BACKINGS</u>				
13.8.3	<p>Screed; cement and sand (1:4) 12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally Walls; vertical; internal</p>	m2	506		
	Total for Internal Wall Finishes Carried Forward				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Brought Down				
	TILE, SLAB OR BLOCK FINISHINGS				
	Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout				
	6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to				
13.8.4	Walls; vertical; internal	m2	506		
13.8.5	Extra over for 100 mm wide decorative tile to approval	m	80		
13.8.6	Brushed stainless steel edging strip to corners of granito walls	m	115		
	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s);				
	20 mm thick; butt joints straight both ways				
13.8.7	Walls; vertical; external	m2	18		
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	Steel trowelled plastered surfaces of wall; internally				
13.8.8	Walls; vertical; internal	m2	686		
13.8.9	Columns; vertical; internal	m2	888		
	TOTAL FOR SEVENTH FLOOR INTERNAL WALL FINISHES				
	CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
	<u>ELEMENT NO 9</u>				
	<u>FLOOR FINISHES</u>				
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
	30 mm thick one coat beds; wood floated; to concrete or block work base; generally to				
13.9.1	Floors; horizontal; internal; receive granito tiles	m2	830		
	WATERPROOFING				
	Works to be executed by an approved specialist				
	Supply and fix waterproofing solution as per the specifications attached:-				
13.9.2	Over 300mm wide; on flat surface	m2	76		
	Total for Internal Floor Finishes Carried Forward				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Brought Down				
13.9.3	GRANITO TILES Supply and fix approved non-slip granito floor tiles as per attached specifications 8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to Floors; level; internal;	m2	830		
	TOTAL FOR SEVENTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
13.10.1	ELEMENT NO 10 CEILING FINISHES GYPSUM PLASTERBOARD 12mm Thick gypsum plasterboard fixed as per attached specifications Horizontal ceiling ; internal	m2	400		
13.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	86		
13.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	54		
13.10.4	ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications Horizontal ceiling ; internal	m2	200		
13.10.5	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	50		
13.10.6	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth Ceiling; horizontal; internal	m2	50		
13.10.7	Beams; horizontal; Internal PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces	m2	50		
13.10.8	Ceilings ; girth over 300 mm ; internal	m2	50		
13.10.9	Beams; horizontal; Internal Carried to Collection	m2	50	Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
13.10.10	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal	m2	400		
13.10.11	ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:- Butt joints; over 300mm wide	m2	100		
13.10.12	Ditto perforated for backlighting	m2	40		
	Carried to Collection			Ksh	
	CEILING FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.				
	TOTAL FOR SEVENTH FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	
	ELEMENT NO 11				
	FITTINGS				
	VANITIES				
13.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
13.11.2	Ditto 2000 mm long	No	6		
13.11.3	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges,	m2	6		
	TOTAL FOR SEVENTH FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 13			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Bill No. 13				
	SEVENTH FLOOR				
	<u>BILL SUMMARY- SEVENTH FLOOR</u>				
1	FRAME				
2	STAIRCASE AND STAIRCASE FINISHES				
3	INTERNAL WALLING				
4	EXTERNAL WALLING				
5	DOORS AND ASSOCIATED FINISHES				
6	WINDOWS AND ASSOCIATED FINISHES				
7	EXTERNAL WALL FINISHES				
8	INTERNAL WALL FINISHES				
9	FLOOR FINISHES				
10	CEILING FINISHES				
11	FITTINGS				
	Carried to Final Summary			Ksh	
	Bill No. 13				
	SEVENTH FLOOR				

14. BILL NO. 14: EIGHTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 14: EIGHTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
14.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	34		
	Down stand beams at sunshade				
14.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	13		
	Columns				
14.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	22		
	Shear walls				
14.1.4	450 mm thick	m3	99		
	Lift shaft walls				
14.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
14.1.6	225 mm thick ; horizontal	m2	650		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
14.1.7	200 mm thick ; horizontal	m2	650		
	To edges of suspended floor slab				
14.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
14.1.9	Columns or the like; vertical	m2	144		
14.1.10	Shear walls/ lift walls; vertical	m2	736		
14.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
14.1.12	Beams or the like; Horizontal	m2	270		
14.1.13	Down stand beams; horizontal	m2	98		
	Edges of lift wall openings				
14.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
14.1.15	32 mm diameter	kg	3,865		
14.1.16	25 mm diameter	kg	3,486		
14.1.17	20 mm diameter	kg	5,283		
14.1.18	16 mm diameter	kg	3,610		
14.1.19	12 mm Diameter	kg	8,684		
14.1.20	10 mm Diameter	kg	5,268		
14.1.21	8 mm Diameter	kg	6,534		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE		Page No.		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Total Brought Forward from Page No.		14/1 14/2		
	TOTAL FOR EIGHTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm; Vibrated				
14.2.1	Steps, staircases or strings	m3	14		
14.2.2	225 mm thick concrete landings	m2	48		
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
14.2.3	12 mm Diameter	kg	2,065		
14.2.4	10 mm Diameter	kg	1,625		
	Carried to Collection			Ksh	
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
14.2.5	Risers of steps and staircases Girth 75mm to 150mm	m	155		
14.2.6	Edges of strings of staircases Over 225mm but not exceeding 300mm wide	m	32		
14.2.7	Vertical edge : suspended landing : Over 150mm but not exceeding 225mm high	m	52		
14.2.8	To soffits; horizontal Landing	m2	48		
14.2.9	Soffits; sloping Waists of stairs and the like	m2	55		
14.2.10	Waist of stairs; to profile of steps To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made stainless steel (grade 3.1.6) balustrading comprising of 5No 2mm thick x 25mm diameter stainless steel horizontal rails and 3mm thick x 75mm diameter oval stainless steel handrail tube all fixed to 50mm x 12mm thick stainless steel double flat bar vertical support at 1025mm centres fixed to floor including 200mm x 150mm x 15mm thick stainless steel base plate; including fixing supports into concrete and making good all disturbed surfaces all as per Engineer's detailed drawings and approval				
14.2.11	1000 mm high to detail	m	32		
14.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	32		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st grade stainless steel (grade 3.1.6) glazed balustrading comprising of 12mm thick toughened clear structural glass fixed as per attached specifications				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.2.13	1150 mm high to detail	m	5		
14.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	5		
	STAIRCASE FINISHES				
	Supply and fix granito tiles as per attached specifications:-				
14.2.15	To treads; 300 mm wide with bull nosings	m	155		
	Carried to Collection			Ksh	
14.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	30		
14.2.17	To risers; 150 mm high	m	155		
14.2.18	To landing; tiles to approved sizes and pattern	m2	48		
14.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
14.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
14.2.21	150 mm high skirting to stairs	m	52		
14.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles	m	155		
	BEDS OR BACKINGS				
	Screed ; Cement sand backing (1:4)				
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
14.2.23	Treads; 300 mm wide; internal	m	155		
14.2.24	Risers; 150 mm high; internal	m	155		
	15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to				
14.2.25	Landing	m2	48		
14.2.26	Open strings of staircases; 225 to 300mm; internal	m	32		
14.2.27	Open edges of landing; 150 to 225mm; internal	m	60		
14.2.28	150 mm high skirting to stairs	m	52		
14.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	32		
	INSITU FINISHES				
	Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;				
	Soffits of stairs; sloping				
14.2.29	Over 300mm girth; internal	m2	55		
	Soffits of landing; horizontal				
14.2.30	Over 300mm girth; internal	m2	48		
	To open edges of landing				
14.2.31	Girth 150 to 225mm; internal	m	60		
	To open string of staircase				
14.2.32	Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	
	PAINTING AND DECORATING				
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
	To steel trowelled plastered surfaces				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.2.33	Soffits of stairs; sloping Over 300mm girth; internal	m2	55		
14.2.34	Soffits of landing; horizontal Over 300mm girth; internal	m2	48		
14.2.35	To open edges of landing Girth 150 to 225mm; internal	m	60		
14.2.36	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	32		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE		Page No.		
	Total Brought Forward from Page No.		14/2 14/3 14/4 14/5		
	TOTAL FOR EIGHTH FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	<u>ELEMENT NO 3</u> <u>INTERNAL WALLING</u> BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
14.3.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	396		
14.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	60		
14.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	60		
	Total for Internal Walling Carried Forward				
	Brought Down				
	<u>INTERNAL PARTITIONING</u> ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery				
14.3.4		m2	34		
	TOTAL FOR EIGHTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	<u>ELEMENT NO 4</u> <u>EXTERNAL WALLING</u> BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
14.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	84		
14.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	TOTAL FOR EIGHTH FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	ELEMENT NO 5				
	DOORS AND ASSOCIATED FINISHES				
	WPC Door frame moulded to approval				
14.5.1	200 x 50 mm thick , rebated	m	140		
14.5.2	150 x 50 mm thick , rebated	m	15		
	WPC Door Architraves				
14.5.3	75 x 25 mm moulded	m	155		
	WPC Door Quadrants				
14.5.4	50 x 25 mm	m	155		
	Carried to Collection			Ksh	
	ALUMINIUM DOORS				
	Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
14.5.5	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	4		
14.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	4		
	FIRST QUALITY WPC DOORS				
	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
14.5.7	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	-		
14.5.8	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	2		
14.5.9	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	10		
14.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
14.5.11	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
14.5.12	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	1		
14.5.13	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	-		
	FIRE DOOR				
	120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof ironmongery; all in accordance to manufacturers printed instructions and Engineers approval.				
14.5.14	Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.5.15	Ditto 900 mm wide x 2700 mm high Carried to Collection	No	1	Ksh	
	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval				
14.5.16	Double door; Overall size 1800 x 2700mm high	No	-		
14.5.17	Double door; Overall size 2400 x 2700mm high IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-	No	1		
14.5.18	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	29		
14.5.19	32x600mm high satin stainless steel straight pull handles back to back to approval	No	19		
14.5.20	Stainless steel Abbloys handles on Rose	No	19		
14.5.21	19x225mm high S.S conceal fix pull handles	No	19		
14.5.22	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	10		
14.5.23	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
14.5.24	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
14.5.25	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	10		
14.5.26	Oval satin nickel floor mounted door stop fixed with screw to approval	No	10		
14.5.27	800 x 200mm high stainless steel kick plate	No	20		
14.5.28	Satin steel Euro profile escutcheons	No	10		
14.5.29	Assa Abbloys Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	10		
14.5.30	Coat and hat hook with rubber tip in stainless steel finish	No	10		
14.5.31	Indicator bolts Carried to Collection	No.	10	Ksh	
	PAINTING AND DECORATING Metal surfaces				
14.5.32	Over 300 mm ; Internally	m2	15		
14.5.33	Over 300 mm ; externally	m2	15		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:-				
	Wood surfaces; before fixing				
14.5.34	Door frame; 200 mm to 300 mm	m	155		
14.5.35	Architraves girth not exceeding 100 mm	m	155		
14.5.36	Quadrants/Beading girth not exceeding 100 mm	m	35		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved Wood surfaces				
14.5.37	Door frame; 200 mm to 300 mm	m	155		
14.5.38	Architraves girth not exceeding 100 mm	m	155		
14.5.39	Quadrants/beading girth not exceeding 100 mm	m	35		
14.5.40	General surfaces of wood	m2	20		
	Carried to Collection			Ksh	
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE		Page No.		
	Total Brought Forward from Page No.		14/6		
			14/7		
			14/8		
			14/9		
	TOTAL FOR EIGHTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	ELEMENT NO 6				
	WINDOWS AND ASSOCIATED FINISHES				
	ALUMINIUM PURPOSE MADE UNITS				
	Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
14.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	12		
14.6.2	Window overall size 2100 x 2700 mm high ditto	No	4		
	TOTAL FOR EIGHTH FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	ELEMENT NO 7				
	EXTERNAL WALL FINISHES				
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
14.7.1	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	84		
14.7.2	Ditto concrete surfaces	m2	176		
	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-				
14.7.3	Concrete surfaces;externally	m2	136		
	CURTAIN WALLING				
	Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:-				
14.7.4	Curtain walling generally; diagonal sections; curved to profile	m2	60		
14.7.5	Curtain walling generally; irrespective of shape	m2	20		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.7.6	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval.	No	2		
14.7.7	Window size 975 x 1050 mm high Window size 890 x 1050 mm high Carried to Collection	No	2	Ksh	
14.7.8	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally	m2	126		
14.7.9	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	50		
14.7.10	Block wall surfaces; vertical; Externally Carried to Collection	m2	84	Ksh	
	EXTERNAL WALL FINISHES COLLECTION PAGE Total Brought Forward from Page No. TOTAL FOR EIGHTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14		Page No. 14/10 14/11	Ksh	
14.8.1	ELEMENT NO 8 INTERNAL WALL FINISHES INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	747		
14.8.2	Ditto columns; vertical; internally BEDS OR BACKINGS Screed; cement and sand (1:4) 12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally	m2	880		
14.8.3	Walls; vertical; internal Total for Internal Wall Finishes Carried Forward	m2	445		
	Brought Down TILE, SLAB OR BLOCK FINISHINGS Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in "PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout 6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.8.4	Walls; vertical; internal	m2	445		
14.8.5	Extra over for 100 mm wide decorative tile to approval	m	80		
14.8.6	Brushed stainless steel edging strip to corners of granito walls	m	115		
	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s); 20 mm thick; butt joints straight both ways				
14.8.7	Walls; vertical; external PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally	m2	18		
14.8.8	Walls; vertical; internal	m2	747		
14.8.9	Columns; vertical; internal	m2	880		
	TOTAL FOR EIGHTH FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	ELEMENT NO 9 FLOOR FINISHES BEDS OR BACKINGS Screed; cement and sand (1:4) 30 mm thick one coat beds; wood floated; to concrete or block work base; generally to				
14.9.1	Floors; horizontal; internal; receive granito tiles	m2	740		
	WATERPROOFING <i>Works to be executed by an approved specialist</i> Supply and fix waterproofing solution as per the specifications attached:-				
14.9.2	Over 300mm wide; on flat surface	m2	74		
	Total for Internal Floor Finishes Carried Forward				
	Brought Down GRANITO TILES Supply and fix approved non-slip granito floor tiles as per attached specifications 8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to				
14.9.3	Floors; level; internal;	m2	740		
	TOTAL FOR EIGHTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14			Ksh	
	ELEMENT NO 10 CEILING FINISHES GYPSUM PLASTERBOARD 12mm Thick gypsum plasterboard fixed as per attached specifications				
14.10.1	Horizontal ceiling ; internal	m2	400		
14.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m2	120		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	75		
14.10.4	ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications	m2	150		
14.10.5	Horizontal ceiling ; internal Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	50		
14.10.6	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth	m2	50		
14.10.7	Ceiling; horizontal; internal Beams; horizontal; Internal PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces	m2	50		
14.10.8	Ceilings ; girth over 300 mm ; internal	m2	50		
14.10.9	Beams; horizontal; Internal Carried to Collection	m2	50	Ksh	
14.10.10	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved To steel trowelled plastered surfaces Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:-	m2	400		
14.10.11	Butt joints; over 300mm wide	m2	80		
14.10.12	Ditto perforated for backlighting Carried to Collection	m2	20	Ksh	
	CEILING FINISHES COLLECTION PAGE Total Brought Forward from Page No. TOTAL FOR EIGHTH FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 14		Page No. 14/13 14/14	Ksh	
14.11.1	ELEMENT NO 11 FITTINGS VANITIES 3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary	No	2		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
14.11.2	formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval Ditto 2000 mm long	No	4		
14.11.3	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges, Total for Fittings Carried Forward	m2	14		
14.11.4	Brought Down KITCHEN WORKTOP 6000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete kitchen top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	1		
14.11.5	Extra over for making 1 No. hole for sink size 1500 x 550 mm including necessary formwork.	No	1		
14.11.6	20 mm thick granite slab fixed to concrete top Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges, TOTAL FOR EIGHTH FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 14	m2	6		
				Ksh	
1	Bill No. 14 EIGHTH FLOOR <u>BILL SUMMARY- EIGHTH FLOOR</u> FRAME				
2	STAIRCASE AND STAIRCASE FINISHES				
3	INTERNAL WALLING				
4	EXTERNAL WALLING				
5	DOORS AND ASSOCIATED FINISHES				
6	WINDOWS AND ASSOCIATED FINISHES				
7	EXTERNAL WALL FINISHES				
8	INTERNAL WALL FINISHES				
9	FLOOR FINISHES				
10	CEILING FINISHES				
11	FITTINGS				
	Carried to Final Summary			Ksh	
	Bill No. 14 EIGHTH FLOOR				

15. BILL NO. 15: NINTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 15: NINTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Beams				
15.1.1	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	23		
	Down stand beams at sunshade				
15.1.2	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m3	16		
	Columns				
15.1.3	Columns; vertical or sloping exceeding 15 degrees from horizontal	m3	14		
	Shear walls				
15.1.4	450 mm thick	m3	94		
	Lift shaft walls				
15.1.5	450 mm thick	m3	67		
	Suspended solid floor slab				
15.1.6	225 mm thick ; horizontal	m2	500		
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Soffits of solid floors				
15.1.7	200 mm thick ; horizontal	m2	500		
	To edges of suspended floor slab				
15.1.8	Girth 150 mm to 225 mm	m	300		
	To vertical or battering sides				
15.1.9	Columns or the like; vertical	m2	96		
15.1.10	Shear walls/ lift walls; vertical	m2	712		
15.1.11	Ditto but to curved surfaces to required radii	m2	50		
	To sides and soffits				
15.1.12	Beams or the like; Horizontal	m2	180		
15.1.13	Down stand beams; horizontal	m2	126		
	Edges of lift wall openings				
15.1.14	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	Carried to Collection			Ksh	
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
15.1.15	32 mm diameter	kg	2,577		
15.1.16	25 mm diameter	kg	5,280		
15.1.17	20 mm diameter	kg	5,210		
15.1.18	16 mm diameter	kg	6,220		
15.1.19	12 mm Diameter	kg	4,342		
15.1.20	10 mm Diameter	kg	2,256		
15.1.21	8 mm Diameter	kg	6,634		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Total Brought Forward from Page No.		Page No. 15/1 15/2		
	TOTAL FOR NINTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
	ELEMENT NO 2				
	STAIRCASES AND STAIRCASE FINISHES				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm; Vibrated				
15.2.1	Steps, staircases or strings	m3	8		
15.2.2	225 mm thick concrete landings	m2	16		
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449				
	including bends, hooks, tying wire, distance blocks, and				
	spacers.				
15.2.3	12 mm Diameter	kg	1,652		
15.2.4	10 mm Diameter	kg	928		
	Carried to Collection			Ksh	
	FORMWORK TO INSITU CONCRETE				
	Formwork generally				
	Risers of steps and staircases				
15.2.5	Girth 75mm to 150mm	m	54		
	Edges of strings of staircases				
15.2.6	Over 225mm but not exceeding 300mm wide	m	13		
	Vertical edge : suspended landing :				
15.2.7	Over 150mm but not exceeding 225mm high	m	20		
	To soffits; horizontal				
15.2.8	Landing	m2	16		
	Soffits; sloping				
15.2.9	Waists of stairs and the like	m2	21		
	Waist of stairs; to profile of steps				
15.2.10	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	13		
	METAL WORK				
	BALUSTRADES				
	ROLLED PLATES, BARS, SECTIONS AND TUBES				
	Supply, assemble and fix 1000mm high purpose made				
	stainless steel (grade 3.1.6) balustrading comprising of 5No				
	2mm thick x 25mm diameter stainless steel horizontal rails				
	and 3mm thick x 75mm diameter oval stainless steel				
	handrail tube all fixed to 50mm x 12mm thick stainless steel				
	double flat bar vertical support at 1025mm centres fixed to				
	floor including 200mm x 150mm x 15mm thick stainless				
	steel base plate; including fixing supports into concrete and				
	making good all disturbed surfaces all as per Engineer's				
	detailed drawings and approval				
15.2.11	1000 mm high to detail	m	13		
15.2.12	3mm thick x 50 mm diameter mild steel tube handrail fixed to wall/column with stainless steel brackets.	m	13		
	GLASS BALUSTRADES TO BALCONIES				
	Supply, assemble and fix 1150mm high purpose made 1st				
	grade stainless steel (grade 3.1.6) glazed balustrading				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.2.13	comprising of 12mm thick toughened clear structural glass fixed as per attached specifications 1150 mm high to detail	m	5		
15.2.14	3mm thick x 75mm Diameter oval stainless steel tube handrail fixed to wall/column with stainless steel brackets	m	5		
15.2.15	STAIRCASE FINISHES Supply and fix granito tiles as per attached specifications:- To treads; 300 mm wide with bull nosings Carried to Collection	m	54	Ksh	
15.2.16	Extra over treads for 2 No. water drip on either sides of every step each 150 mm long x 300 mm wide to match	m	15		
15.2.17	To risers; 150 mm high	m	54		
15.2.18	To landing; tiles to approved sizes and pattern	m2	16		
15.2.19	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme	m	13		
15.2.20	Open edges of landing; 150 to 225mm; internal	m	60		
15.2.21	150 mm high skirting to stairs	m	20		
15.2.22	Extra; 3 No.5 mm wide x 3 mm deep anti slip grooves cut into granito tiles BEDS OR BACKINGS Screed ; Cement sand backing (1:4) 15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to	m	54		
15.2.23	Treads; 300 mm wide; internal	m	54		
15.2.24	Risers; 150 mm high; internal 15 mm thick one coat beds; wood floated to receive granito tiles (m/s) to concrete or block work base; generally to	m	54		
15.2.25	Landing	m2	16		
15.2.26	Open strings of staircases; 225 to 300mm; internal	m	13		
15.2.27	Open edges of landing; 150 to 225mm; internal	m	60		
15.2.28	150 mm high skirting to stairs	m	20		
15.2.29	To edges of waists of stairs cut to profile of steps - 350 mm wide extreme INSITU FINISHES Lime plaster ; cement and sand (1:4) ; steel trowelled ; hard and smooth 20mm thick 2 no coat work ; to concrete or block work base (m/s) generally to;	m	13		
15.2.30	Soffits of stairs; sloping Over 300mm girth; internal	m2	21		
15.2.31	Soffits of landing; horizontal Over 300mm girth; internal	m2	16		
15.2.32	To open edges of landing Girth 150 to 225mm; internal	m	60		
15.2.33	To open string of staircase Open strings of staircases; 225 to 300mm; internal Carried to Collection	m	13	Ksh	
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; two coats CROWN 'solo' or other equal and approved pure satin				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.2.34	emulsion; approved colour; applied in accordance with manufacturer's printed instruction To steel trowelled plastered surfaces Soffits of stairs; sloping Over 300mm girth; internal	m2	21		
15.2.35	Soffits of landing; horizontal Over 300mm girth; internal	m2	16		
15.2.36	To open edges of landing Girth 150 to 225mm; internal	m	60		
15.2.37	To open string of staircase Open strings of staircases; 225 to 300mm; internal	m	13		
	Carried to Collection			Ksh	
	FRAME COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 15/2 15/3 15/4 15/5		
	TOTAL FOR NINTH FLOOR STAIRCASE AND STAIRCASE FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
15.3.1	<u>ELEMENT NO 3</u> <u>INTERNAL WALLING</u> BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3) 200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	168		
15.3.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	75		
15.3.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	45		
	Total for Internal Walling Carried Forward				
15.3.4	Brought Down <u>INTERNAL PARTITIONING</u> ALUMINIUM FRAMED PARTITIONING Supply, assemble and fix 2400 mm high purpose made matt powder coated finish aluminium partitions comprising 3 mm thick (minimum) approved aluminium sections comprising of 100 x 50 mm top & bottom rails and 100 x 50 mm vertical members at 1200 mm centres; glazed with and including 8 mm thick laminated glass including all accessories such as beadings and sub frames, 150 mm wide flashing to seal, rubber gaskets and the like: all necessary ironmongery	m2	19		
	TOTAL FOR NINTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
	<u>ELEMENT NO 4</u> <u>EXTERNAL WALLING</u> BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	134		
15.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		
	TOTAL FOR NINTH FLOOR EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
	<u>ELEMENT NO 5</u>				
	<u>DOORS AND ASSOCIATED FINISHES</u>				
	WPC Door frame moulded to approval				
15.5.1	200 x 50 mm thick , rebated	m	120		
15.5.2	150 x 50 mm thick , rebated	m	25		
	WPC Door Architraves				
15.5.3	75 x 25 mm moulded	m	145		
	WPC Door Quadrants				
15.5.4	50 x 25 mm	m	145		
	Carried to Collection			Ksh	
	ALUMINIUM DOORS				
	Powder Coated Aluminium framed doors including 4 mm + 4 mm toughened laminated glass fabricated as per attached specifications:-				
15.5.5	Single leaf door overall size 900 mm wide x 2700 mm high comprising of 900x 450mm fanlight and 900 x 2250mm openable single leaf	No	3		
15.5.6	Ditto overall size 1800 mm wide x 2700 mm high comprising of 1800x 450mm fanlight and 800 x 2250mm openable single leaf	No	1		
	FIRST QUALITY WPC DOORS				
	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing.				
15.5.7	Single door; 50 mm thick; Overall size 750 mm wide x 2700 mm high comprising of 750 x 450mm high fanlight and 750 x 2250mm high openable door	No	-		
15.5.8	Ditto overall size 800 mm wide x 2400 mm high openable door with 200 x 1200mm high middle view glass	No	2		
15.5.9	Ditto overall size 900 mm wide x 2400 mm high openable door in WCs	No	8		
15.5.10	Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
15.5.11	Single leaf Double Swing overall size 1000 mm wide x 2400 mm high openable door (PWD WCs)	No	2		
15.5.12	Ditto Double leaf door overall size 1800 x 2700mm high complete with 1800 x 300mm high glazed fanlight	No	3		
15.5.13	Ditto Single leaf door overall size 900 x 2700mm high complete with 900 x 300mm high glazed fanlight	No	1		
	FIRE DOOR				
	120 minutes Fire door as "ASTURMADI" or other equal and approved; with fireproof frames, vision panel and hardware; frames and leaf made of 1.5mm thick G.I Steel in filled with rockwool and gypsum powder and finished in polyester powder coating including fixing all necessary fireproof				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.5.14	ironmongery; all in accordance to manufacturers printed instructions and Engineers approval. Double leaved door overall size 1800 mm wide x 2400 mm high with view glass panel overall size 200 mm wide x 600 mm high in 8 mm thick clear polished georgian wired glazing	No	1		
15.5.15	Ditto 900 mm wide x 2700 mm high Carried to Collection	No	1	Ksh	
15.5.16	FRAMELESS GLASS DOOR 12mm thick toughened frameless glass manual sliding/ openable double door; overall size 1800 x 2700 mm high in 2 No. active leaves each of size 900 x 2400 mm high and 2 No. fixed light 900 x 300 mm high complete with and including soft closing hinges, locks, catches, automatic door closer, oval satin door stopper, 500 mm long stainless steel pull handles, stainless steel push/pull plate, accessories, opening mechanism and any other necessary ironmongery all as "ASSA ABLOY" or equal and approved to Engineer's details and approval Double door; Overall size 1800 x 2700mm high	No	-		
15.5.17	Double door; Overall size 2400 x 2700mm high IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:-	No	1		
15.5.18	150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	23		
15.5.19	32x600mm high satin stainless steel straight pull handles back to back to approval	No	5		
15.5.20	Stainless steel Abbloys handles on Rose	No	10		
15.5.21	19x225mm high S.S conceal fix pull handles	No	7		
15.5.22	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	4		
15.5.23	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	5		
15.5.24	Satin Nickel 70mm Euro restricted Double cylinder	No	5		
15.5.25	38mm diameter cylindrical satin steel door stop fixed to floor or wall with screw to approval	No	10		
15.5.26	Oval satin nickel floor mounted door stop fixed with screw to approval	No	10		
15.5.27	800 x 200mm high stainless steel kick plate	No	16		
15.5.28	Satin steel Euro profile escutcheons	No	10		
15.5.29	Assa Abbloys Door closer pwr 4 with sliding rail or other equal and approved in silver finish	No	6		
15.5.30	Coat and hat hook with rubber tip in stainless steel finish	No	8		
15.5.31	Indicator bolts Carried to Collection	No.	8	Ksh	
15.5.32	PAINTING AND DECORATING Metal surfaces Over 300 mm ; Internally	m2	15		
15.5.33	Over 300 mm ; externally	m2	15		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.5.34	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:- Wood surfaces; before fixing Door frame; 200 mm to 300 mm	m	145		
15.5.35	Architraves girth not exceeding 100 mm	m	145		
15.5.36	Quadrants/Beading girth not exceeding 100 mm	m	35		
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved Wood surfaces				
15.5.37	Door frame; 200 mm to 300 mm	m	145		
15.5.38	Architraves girth not exceeding 100 mm	m	145		
15.5.39	Quadrants/beading girth not exceeding 100 mm	m	35		
15.5.40	General surfaces of wood	m2	20		
	Carried to Collection			Ksh	
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 15/6 15/7 15/8 15/9		
	TOTAL FOR NINTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
	ELEMENT NO 6 WINDOWS AND ASSOCIATED FINISHES ALUMINIUM PURPOSE MADE UNITS Supply and fix 100 x 50 x 3 mm (minimum) thick powder coated top - hung openable aluminium framed windows, including glazing with 8 mm thick clear glass as per attached specifications:-				
15.6.1	Window overall size 4100 x 2700 mm high with 2 No. equal top hung openable casement size 2000 x 2000 mm high and 2No fixed lights size 2000 x 700mm high	No	5		
15.6.2	Window overall size 2100 x 2700 mm high ditto	No	3		
	TOTAL FOR NINTH FLOOR WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
	ELEMENT NO 7 EXTERNAL WALL FINISHES INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
15.7.1	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	134		
15.7.2	Ditto concrete surfaces	m2	176		
	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-				
15.7.3	Concrete surfaces;externally	m2	136		
	CURTAIN WALLING				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.7.4	Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:-	m2	50		
15.7.5	Curtain walling generally; diagonal sections; curved to profile	m2	20		
	Extra over curtain walling for Aluminium top hung windows including all necessary ironmongery such as hinges and locking devices to Engineer's approval.				
15.7.6	Window size 975 x 1050 mm high	No	2		
15.7.7	Window size 890 x 1050 mm high	No	2		
	Carried to Collection			Ksh	
15.7.8	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction	m2	126		
	Steel trowelled plastered surfaces of wall; externally				
15.7.9	Concrete surfaces;externally	m2	50		
15.7.10	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-	m2	134		
	Concrete surfaces;externally				
	Block wall surfaces; vertical; Externally				
	Carried to Collection			Ksh	
	EXTERNAL WALL FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 15/10 15/11		
	TOTAL FOR NINTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
15.8.1	<u>ELEMENT NO 8</u>				
	<u>INTERNAL WALL FINISHES</u>				
	INSITU FINISHES				
	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
15.8.1	12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	416		
15.8.2	Ditto columns; vertical; internally	m2	808		
	BEDS OR BACKINGS				
	Screed; cement and sand (1:4)				
15.8.3	12 mm thick one coat backing ; wood floated to receive wall tiles (m/s) to walls generally (m/s) ; internally	m2	400		
	Walls; vertical; internal				
	Total for Internal Wall Finishes Carried Forward				
	Brought Down				
	TILE, SLAB OR BLOCK FINISHINGS				
	Supply and fix approved ceramic wall tiles as described; to approved pattern, sizes and colours; bedding and jointing in				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.8.4	"PEGACOL " tile adhesive or other equal and approved; grouting joints with "BENFER " or other equal and approved epoxy resin-based grout 6 mm thick Butt joints strait both ways; to cement and sand base (m/s) to Walls; vertical; internal	m2	400		
15.8.5	Extra over for 100 mm wide decorative tile to approval	m	80		
15.8.6	Brushed stainless steel edging strip to corners of granito walls	m	80		
15.8.7	Supply and fix full length local granite slabs or other equal and approved granite slabs; to approved pattern; bedding and jointing in approved adhesive with proprietary grouting laid on cement sand bed (m/s); 20 mm thick; butt joints straight both ways Walls; vertical; external	m2	18		
15.8.8	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally	m2	416		
15.8.9	Walls; vertical; internal Columns; vertical; internal	m2	808		
	TOTAL FOR NINTH FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
15.9.1	ELEMENT NO 9 FLOOR FINISHES BEDS OR BACKINGS Screed; cement and sand (1:4) 30 mm thick one coat beds; wood floated; to concrete or block work base; generally to Floors; horizontal; internal; receive granito tiles	m2	570		
15.9.2	WATERPROOFING <i>Works to be executed by an approved specialist</i> Supply and fix waterproofing solution as per the specifications attached:- Over 300mm wide; on flat surface Total for Internal Floor Finishes Carried Forward	m2	95		
15.9.3	Brought Down GRANITO TILES Supply and fix approved non-slip granito floor tiles as per attached specifications 8 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to Floors; level; internal;	m2	570		
	TOTAL FOR NINTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
	ELEMENT NO 10 CEILING FINISHES GYPSUM PLASTERBOARD 12mm Thick gypsum plasterboard fixed as per attached specifications				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.10.1	Horizontal ceiling ; internal	m2	275		
15.10.2	Extra over gypsum ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	120		
15.10.3	Cornices 150 x 25 mm gypsum cornice; as per "classic mouldings" of P.O Box 23292-00603, Tel No.3874432 or other equal and approved	m	75		
15.10.4	ACCOUSTIC CEILING Supply and fix approved suspended semi-recessed L.I.G. fine fissured acoustic ceiling on 24mm wide white lay-in grid as per attached specifications				
15.10.5	Horizontal ceiling ; internal	m2	85		
15.10.6	Extra over acoustic ceiling for forming extensively profiled bulkheads and for recessed light fitting to approval	m	35		
15.10.7	INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel trowelled hard and smooth				
15.10.8	Ceiling; horizontal; internal	m2	50		
15.10.9	Beams; horizontal; Internal	m2	50		
15.10.10	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction				
15.10.11	To steel trowelled plastered surfaces				
15.10.12	Ceilings ; girth over 300 mm ; internal	m2	50		
15.10.13	Beams; horizontal; Internal	m2	50		
15.10.14	Carried to Collection			Ksh	
15.10.15	One undercoat ; two coats matt emulsion paint ; to Crown or equal and approved				
15.10.16	To steel trowelled plastered surfaces				
15.10.17	Plasterboard ; including for Altek filler compound to joints, skimming etc ;girth over 300 mm ; internal	m2	275		
15.10.18	ALUMINIUM COMPOSITE CEILING Supply and fix nano self cleansing perforated aluminium composite cladding sheets in panes sizes ranging from 400 x 400 mm as per specifications attached:-				
15.10.19	Butt joints; over 300mm wide	m2	60		
15.10.20	Ditto perforated for backlighting	m2	15		
15.10.21	Carried to Collection			Ksh	
15.10.22	CEILING FINISHES COLLECTION PAGE				
15.10.23	Total Brought Forward from Page No.				
15.10.24	TOTAL FOR NINTH FLOOR -CEILING FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 15			Ksh	
15.10.25	ELEMENT NO 11				
15.10.26	FITTINGS				
15.10.27	VANITIES				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
15.11.1	3000mm long x 600mm wide x 900mm high worktop in 100 mm thick reinforced concrete top with 100mm concrete thick plinth; reinforced with BRC mesh including necessary formwork and plaster and paint to soffits to approval including 20mm thick melawood wrapped MDF boarding in top, bottom, ends, and vertical divisions all blocked together, factory edging; Doors and drawers with rounded edges and self closing and including forming finger grip to bottom of doors, and supplying and fixing of all necessary ironmongery (malpa hinges, brass cabinet knobs, brass magnetic ball catches, drawer soft slide, handles etc) all in accordance to Engineerural drawings and to Engineer's approval	No	2		
15.11.2	Ditto 2000 mm long 20 mm thick granite slab fixed to concrete top	No	1		
15.11.3	Supply and fix granite top & splash back fixed to and including approved adhesive including all necessary rounding of edges, TOTAL FOR NINTH FLOOR -KITCHEN WORKTOP CARRIED FORWARD TO SUMMARY OF BILL NO. 15	m2	8		
				Ksh	
1	Bill No. 15 NINTH FLOOR <u>BILL SUMMARY- NINTH FLOOR</u> FRAME				
2	STAIRCASE AND STAIRCASE FINISHES				
3	INTERNAL WALLING				
4	EXTERNAL WALLING				
5	DOORS AND ASSOCIATED FINISHES				
6	WINDOWS AND ASSOCIATED FINISHES				
7	EXTERNAL WALL FINISHES				
8	INTERNAL WALL FINISHES				
9	FLOOR FINISHES				
10	CEILING FINISHES				
11	FITTINGS Carried to Final Summary				
	Bill No. 15 NINTH FLOOR			Ksh	

16. BILL NO. 16: TENTH FLOOR

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 16: TENTH FLOOR				
	ELEMENT NO 1				
	FRAME				
	INSITU CONCRETE : REINFORCED				
	Normal; class 30/20mm : Vibrated				
	Shear walls				
16.1.1	450 mm thick	m3	36		
	Lift shaft walls				
16.1.2	450 mm thick	m3	67		
16.1.3	Shear walls/ lift walls; vertical	m2	456		
	Edges of lift wall openings				
16.1.4	Girth exceeding 375 mm but not exceeding 450 mm	m	33		
	REINFORCEMENT (PROVISIONAL)				
	T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.				
16.1.5	16 mm diameter	kg	3,610		
16.1.6	12 mm Diameter	kg	4,342		
16.1.7	10 mm Diameter	kg	2,756		
16.1.8	8 mm Diameter	kg	3,634		
	TOTAL FOR TENTH FLOOR FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 16			Ksh	
	ELEMENT NO 2				
	INTERNAL WALLING				
	BLOCKWORK				
	Concrete hollow block ; B.S 2028 ; 7 N per square millimeter in cement sand mortar (1:3)				
16.2.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	64		
16.2.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	48		
16.2.3	100 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	-		
	TOTAL FOR TENTH FLOOR INTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 16			Ksh	
	ELEMENT NO 3				
	DOORS AND ASSOCIATED FINISHES				
	WPC Door frame moulded to approval				
16.3.1	200 x 50 mm thick , rebated	m	10		
16.3.2	150 x 50 mm thick , rebated	m	50		
	WPC Door Architraves				
16.3.3	75 x 25 mm moulded	m	60		
	WPC Door Quadrants				
16.3.4	50 x 25 mm	m	60		
	FIRST QUALITY WPC DOORS				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
16.3.5	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing. Ditto overall size 800 mm wide x 2400 mm high openable door (Duct doors)	No	7		
16.3.6	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:- 150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	11		
16.3.7	32x600mm high satin stainless steel straight pull handles back to back to approval	No	7		
16.3.8	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	7		
	TOTAL FOR TENTH FLOOR DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 16			Ksh	
16.4.1	ELEMENT NO 4 EXTERNAL WALL FINISHES INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth Ditto concrete surfaces	m2	176		
16.4.2	Prepare and apply granular acrylic finish as "Marmoran" from Galaxy Paints or other equal and approved exterior surface paint to:- Concrete surfaces; externally Total for External Wall Finishes Carried Forward	m2	136		
16.4.3	Brought Down CURTAIN WALLING Supply and fix 150 x 80 mm x 3mm thick powder coated aluminium framed curtain walling; with 12mm thick laminated glass as per attached specifications:- Curtain walling generally; diagonal sections; curved to profile	m2	50		
16.4.4	Curtain walling generally; irrespective of shape One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally	m2	20		
16.4.5	Concrete surfaces;externally Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:-	m2	176		
16.4.6	Concrete surfaces;externally	m2	50		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	TOTAL FOR TENTH FLOOR EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 16			Ksh	
	<u>ELEMENT NO 5</u> INTERNAL WALL FINISHES INSITU FINISHES				
16.5.1	Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	224		
16.5.2	Ditto columns; vertical; internally	m2	456		
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally				
16.5.3	Walls; vertical; internal	m2	224		
16.5.4	Columns; vertical; internal	m2	456		
	TOTAL FOR TENTH FLOOR INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 16			Ksh	
	<u>ELEMENT NO 6</u> FLOOR FINISHES BEDS OR BACKINGS				
	Screed; cement and sand (1:4) 30 mm thick one coat beds; wood floated; to concrete or block work base; generally to				
16.6.1	Floors; horizontal; internal; receive granito tiles	m2	500		
16.6.2	Ditto to receive APP	m2	500		
	WATERPROOFING <i>Works to be executed by an approved specialist</i> Supply and apply Two coats of APP waterproofing membrane on screeded surface including all necessary surface preparations all in accordance with the manufacturer's printed instructions & Engineer's approval				
16.6.3	On flat surface including 200 mm end and side laps Supply and fix approved 25 mm thick floor precast concrete floor tiles as "KENYA BUILDERS" or equal and approved as described to approved pattern, sizes and colours; bedding and jointing in cement mortar (1:4) grouting joints with proprietary grouting laid on cement sand bed (m/s); 25 mm Thick; butt joints straight both ways; to cement and sand base (m/s) generally to	m2	500		
16.6.4	Floors; level; internal;	m2	500		
16.6.5	150 mm high skirting ditto	m2	100		
	Drainage 100 mm diameter pvc fulbora complete with associated builders works				
16.6.6		No.	20		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	TOTAL FOR TENTH FLOOR - FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 16			Ksh	
1	Bill No. 16 TENTH FLOOR <u>BILL SUMMARY- TENTH FLOOR</u> FRAME				
2	INTERNAL WALLING				
3	DOORS AND ASSOCIATED FINISHES				
4	EXTERNAL WALL FINISHES				
5	INTERNAL WALL FINISHES				
6	FLOOR FINISHES				
	Carried to Final Summary			Ksh	
	Bill No. 16 TENTH FLOOR				

17. BILL NO. 17 BUILDER'S WORK SUMMARY PAGE

Bill No.	DESCRIPTION	UNIT	QTY	AMOUNT
	BILL NO. 17 BUILDER'S WORK SUMMARY PAGE Total Brought Forward from Page No.			
3	SUBSTRUCTURE BASEMENT			
4	BASEMENT STAIRS AND RAMPS			
5	BASEMENT WORKS			
6	GROUND FLOOR			
7	1ST FLOOR			
8	2ND FLOOR			
9	3RD FLOOR			
10	4TH FLOOR			
11	5TH FLOOR			
12	6TH FLOOR			
13	7TH FLOOR			
14	8TH FLOOR			
15	9TH FLOOR			
16	10TH FLOOR			
	Carried to Grand Summary		Ksh	-
	Bill No. 17 BUILDER'S WORKS SUMMARY			

18. BILL NO. 18 : SERVICE BUILDING

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 18 : SERVICE BUILDING				
	ELEMENT NO 1				
	SUBSTRUCTURES				
	(All Provisional)				
	Site Preparation				
18.1.1	Clear site of all bushes, shrubs, small trees, grub up roots and remove from site	m2	70		
	EXCAVATION AND EARTH WORKS				
18.1.2	Excavate oversite soil average 150 mm deep and cart away from site	m2	70		
	Bulk excavation; starting from reduced level:-				
18.1.3	Not exceeding 1.5m deep	m3	105		
18.1.4	Exceeding 1.5 m but not exceeding 3.0 m deep	m3	10		
	Pits ; to receive isolated bases or the like; starting from reduced level:-				
18.1.5	Not exceeding 1.5m deep	m3	18		
18.1.6	Exceeding 1.5 m but not exceeding 3.0 m deep	m3	5		
	Extra over all kinds of excavation irrespective of depth for:-				
18.1.7	All kinds of rock	m3	30		
18.1.8	Trim and level sides and surfaces of rock	m2	50		
	DISPOSAL				
	Surplus excavated materials				
18.1.9	Load and cart away surplus excavated material from site to contractors approved tipping area off site	m3	149		
	Backfill material				
18.1.10	Backfill approved imported material (murram or red soil) and compacting in layers maximum 150 mm thick	m3	210		
18.1.11	Return, fill and ram selected excavated materials in layers maximum 150 mm thick	m3	50		
	Disposal of water				
18.1.12	Allow for keeping excavation free from all water including spring or running water by pumping, bailing or otherwise	Item	1		
	Plunking and strutting				
18.1.13	Planking and strutting to sides of all excavations : keep excavations free from all fallen materials	Item	1		
	FRENCH DRAIN FILLING				
	Carried to Collection				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.1.14	Aggregate filling in making up levels Over 300mm thick; depositing loose approved aggregate to sides of basement wall maximum size of aggregate to be 20mm	m3	32		
18.1.15	Open ended perforated UPVC french drain pipe laid to fall 1 in 200 including setting in 20mm loose aggregate surround (m/s) encased in geotextile membrane all to Engineer's approval 200mm diameter	m	30		
18.1.16	FILLING Hardcore Supply approved hardcore on site or other equal and approved base material in making up levels. Over 300mm thick; depositing and compacting in layers maximum 150 mm thick.	m3	70		
18.1.17	Stone or quarry dust Blinding surfaces of fill 50 mm thick	m2	70		
18.1.18	Damp-proof membranes 1000 gauge damp proof membrane over blinded hardcore including 300 mm end & side laps	m2	70		
18.1.19	CONCRETE WORK Insitu ; mass concrete ; class 20/25mm Strip Footing	m2	21		
18.1.20	Bases/Pads; average 50 mm thick Insitu; class 20/25mm; vibrated Beams; horizontal or sloping not exceeding 15 degrees from horizontal	m2	16		
18.1.21	Generally Foundation Pads	m3	8		
18.1.22	Generally thickness exceeding 300 mm Columns; Vertical or sloping exceeding 15 degrees from horizontal	m3	8		
18.1.23	Generally Ground floor slab	m3	14		
18.1.24	225 mm thick ; horizontal Strip Footing	m2	70		
18.1.25	Generally; thickness not exceeding 300 mm REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.	m3	4		
18.1.26	32 mm diameter	kg	50		
18.1.27	25 mm diameter	kg	75		
	Carried to Collection				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.1.28	20 mm diameter	kg	564		
18.1.29	16 mm diameter	kg	4,331		
18.1.30	12 mm Diameter	kg	1,561		
18.1.31	8 mm Diameter	kg	2,567		
	Fabric; B.S. 4483 Reference A142; mesh 200 x 200 mm weight 2.22 kgs per square meter (measured net - no allowance made for laps); including bends, tying wire and distance blocks				
18.1.32	In ground floor slab	m2	70		
	FORMWORK TO INSITU CONCRETE				
	Form work generally				
	Edges of ground floor slab				
18.1.33	150 to 225 mm wide	m	35		
	Sides ; vertical or battering				
18.1.34	Columns or the like	m2	64		
18.1.35	Pads or column bases or the like	m2	16		
18.1.36	Strip footing	m2	14		
	Foundation Walling				
	Selected approved quality natural quarry stone fine hand dressed and cut to regular block size: stone load bearing blocks (7N/mm2) as per attached specifications				
18.1.37	200mm Thick skin walling	m2	140		
	DRAINAGE				
18.1.38	Form or leave in concrete raft 200mm wide x 50mm deep channel including covering in mild steel grating; horizontal all to approval	m	10		
	Carried to Collection				
	SUBSTRUCTURE COLLECTION PAGE				
	Total Brought Forward from Page No.				
			Page No.		
			18/1		
			18/2		
			18/3		
	TOTAL FOR SERVICE BUILDING SUBSTRUCTURES CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
18.2.1	ELEMENT NO 2 FRAME INSITU CONCRETE : REINFORCED Normal; class 25/20mm : Vibrated Beams Beams; horizontal or sloping not exceeding 15 degrees from horizontal Columns	m3	7		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.2.2	Columns; vertical or sloping exceeding 15 degrees from horizontal FORMWORK TO INSITU CONCRETE Formwork generally To sides and soffits	m3	6		
18.2.3	Beams or the like; Horizontal To vertical or battering sides	m2	60		
18.2.4	Columns or the like; vertical REINFORCEMENT (PROVISIONAL) T-Bars; Deformed steel ribbed reinforcement bars; B.S. 4449 including bends, hooks, tying wire, distance blocks, and spacers.	m2	38		
18.2.5	Assorted bars TOTAL FOR SERVICE BUILDING FRAME CARRIED FORWARD TO SUMMARY OF BILL NO. 18	kg	1,500		
18.3	ELEMENT NO 3 ROOFING ROOF CONSTRUCTION. STRUCTURAL STEELWORK The following in framed structural steelwork : complete with and including all welded and bolted connections : delivery to site and erection with and including one shop coat of zinc plumbate primer Structural steel to BS 4360 and to the Engineers specifications and approval complete with and including fabricating hoisting and fixing in position approximately 11.0 metres from the existing ground level, red oxide primer and two coats chlorinated rubber paint, connection details in steel plates, packing pieces and drilled 100 x 100 x 100mm thick steel angle cleats welds bolts washers and nuts fish plates and steel angle cleats are to be included in the rates for steelwork in the particular trusses where they occur. Framed; weldable Roof trusses ; hoisting 11.0 metres above ground; all fillet welded; all to structural Engineer,s details and specifications; Total for Roofing Carried Forward				
18.3.1	Brought Down 100 x 100 x 4 mm thick SHS bottom chord	kg	180		
18.3.2	150 x 150 x 6mm thick SHS top chord	kg	160		
18.3.3	75 x 75 x 4mm thick SHS struts/ties	kg	250		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.3.4	50 x 50 x 4 mm thick SHS struts/ties Unframed; weldable	kg	165		
18.3.5	150 x 50 x 3mm thick zed purlins	kg	287		
18.3.6	50 x 50 x 6 mm thick steel angle bracings Sundries Labour and material	kg	252		
18.3.7	200 x 200 x 6mm MS cleat plate welded to trusses	No.	150		
18.3.8	16mm diameter, 300mm long steel bolts including nut and washer	No.	65		
18.3.9	Making hole in 100 x 100 x 6mm thick steel plate	No.	75		
18.3.10	R16mm diameter, 1000mm long anti-sag steel rods including nut and washer Roof Covering Galvanized steel box profile sheets; 26 gauge; prepainted Roof covering; 150mm laps on one end and one and a half corrugation side lap; and nailing to timber purlins (m/s) with and including approved roof nails and neoprene washers	m	250		
18.3.11	Roof covering ; generally	m2	90		
18.3.12	Ridge tiles to match	m	10		
18.3.13	Hip tiles to match	m	16		
18.3.14	250mm metal flashing plugged	m	16		
18.3.15	600mm metal valley plate plugged The following in wrot cypress	m	10		
18.3.16	25 x 100mm Tongue & Grooved boarding secret nailed to and including 50 x 50mm celcured wrot cypress bearers or brandering at 600mm centres Rainwater Disposal	m2	30		
18.3.17	18g Galvanised mild steel sheeting; all welds ground smooth	m	50		
18.3.18	300 x 250mm box gutter including soldered joints in the running length fixed to fascia board with and including brackets at approved centers Carried to Collection	m	50		
18.3.19	Extra; for 900 corners.	No.	4		
18.3.20	Extra; 100mm diameter outlet 100mm long UPVC	No.	4		
18.3.21	100mm diameter rainwater downpipe fixed with and including mild steel straps at 900mm centres, plugged and screwed to wall	m	20		
18.3.22	Extra; swanneck bend with 1135mm projection	No.	4		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.3.23	Extra; horse shoe bend Painting and Decorations On Metal work General surfaces of gutters; over 300mm girth external	No.	4		
18.3.24	Tongue & Grooved timber surfaces Prepare and apply three coats of 'CROWN SOLO' or other equal and approved polyurethane varnish to:-	m2	30		
18.3.25	Surfaces of eaves; over 300mm girth external Carried to Collection	m2	30		
	ROOFING COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 18/5 18/6		
	TOTAL FOR SERVICE BUILDING ROOFING CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
	<u>ELEMENT NO 4</u> <u>INTERNAL WALLING</u> BLOCKWORK Concrete hollow block ; B.S 2028 ; 7 N per square milimeter in cement sand mortar (1:3)				
18.4.1	200 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	96		
18.4.2	150 mm Thick; reinforced with hoop iron gauge 20 s.w in every alternative course	m2	36		
	TOTAL FOR SERVICE BUILDING EXTERNAL WALLING CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
	<u>ELEMENT NO 5</u> <u>DOORS AND ASSOCIATED FINISHES</u> WPC Door frame moulded to approval				
18.5.1	200 x 50 mm thick , rebated	m	15		
18.5.2	WPC Door Architraves 75 x 25 mm moulded	m	15		
18.5.3	WPC Door Quadrants 50 x 25 mm	m	15		
	PURPOSE MADE UNITS Mild steel double door comprising of upper fixed panel 1800 x 450 mm high and two bottom openable equal leaves each 900 x 2250 mm high; as per attached specifications:-				
18.5.4	Overall size 1000 mm wide x 2700 mm high FIRST QUALITY WPC DOORS	No.	3		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.5.5	Solid core WPC doors; all sides finished with 4mm thick WPC laminate hot pressed in vacuum machine using high quality glue; solid blocking and leaving provision for ironmongery fixing. Ditto overall size 900 mm wide x 2400 mm high openable door	No	2		
18.5.6	IRONMONGERY Supply and fix the following ironmongery selected from "Union" catalogue issued by "ASSA ABLOY" complete with matching screws:- 150mm x 3.25mm heavy duty power load stainless steel bushed bearing butt hinges with matching screws	Pairs	3		
18.5.7	32x600mm high satin stainless steel straight pull handles back to back to approval	No	2		
18.5.8	Stainless steel Abblooy handles on Rose	No	2		
18.5.9	19x225mm high S.S conceal fix pull handles	No	2		
18.5.10	Stainless steel Euro cylinder TESA multi bolt deadlock -case only	No	2		
18.5.11	Stainless steel Euro cylinder narrow stile lock complete with roller catch and cylinder	No	2		
18.5.12	Satin Nickel 70mm Euro restricted Double cylinder	No	2		
18.5.13	Oval satin nickel floor mounted door stop fixed with screw to approval	No	2		
18.5.14	Satin steel Euro profile escutcheons	No	2		
	PAINTING AND DECORATING One coat primer red oxide colour; one undercoat crown 'solo' ultra undercoat and two finishing coats colour to approval all to crown paint or other equal and approval Carried to Collection				
18.5.15	Metal surfaces Over 300 mm ; Internally	m2	10		
18.5.16	Over 300 mm ; externally	m2	10		
	Prepare and apply one coat Dura coat aluminium wood primer as per Basco Ltd or other equal and approved on back of timber before fixing on:- Wood surfaces; before fixing				
18.5.17	Door frame; 200 mm to 300 mm	m	15		
18.5.18	Architraves girth not exceeding 100 mm	m	15		
18.5.19	Quadrants/Beading girth not exceeding 100 mm	m	5		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	Prepare and apply Three coats Dura coat polyurethane wood seal as per Basco Ltd or other equal and approved Wood surfaces				
18.5.20	Door frame; 200 mm to 300 mm	m	15		
18.5.21	Architraves girth not exceeding 100 mm	m	15		
18.5.22	Quadrants/beading girth not exceeding 100 mm	m	5		
18.5.23	General surfaces of wood	m2	10		
	Carried to Collection				
	DOORS AND ASSOCIATED FINISHES COLLECTION PAGE				
	Total Brought Forward from Page No.		Page No. 18/7 18/8		
	TOTAL FOR SERVICE BUILDING DOORS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
	ELEMENT NO 6 WINDOWS AND ASSOCIATED FINISHES PURPOSE MADE UNITS Supply and fix purpose made mild steel windows comprising of 3 mm thick (minimum) rectangular hollow sections; frame size 100 x 50 mm; complete with 6 mm thick clear glass as per specifications attached:-				
18.6.1	Window overall size 2100 x 2400 mm high	No	3		
	TOTAL FOR SERVICE BUILDING WINDOWS AND ASSOCIATED FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
	ELEMENT NO 7 EXTERNAL WALL FINISHES INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth				
18.7.1	15 mm thick (minimum) 2 No. coat work generally to block wall surfaces; vertical; Externally	m2	96		
18.7.2	Ditto concrete surfaces	m2	22		
	One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats 'CROWN				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
18.7.3	PERMACOTE ULTRAGUARD WITH SILICONE' or other equal and approved pure external quality; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; externally Concrete surfaces;externally	m2	22		
18.7.4	Block wall surfaces; vertical; Externally	m2	96		
18.7.5	Prepare and apply acrylic external quality as Crown Permacote Ultraguard Rain-proof Silicone Paintor other equal and approved exterior surface paint to:- Concrete surfaces;externally	m2	19		
	TOTAL FOR SERVICE BUILDING EXTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
18.8.1	<u>ELEMENT NO 8</u> <u>INTERNAL WALL FINISHES</u> INSITU FINISHES Plaster; 9 mm (minimum) first coat of cement and sand (1:4); 3 mm second coat of cement and lime putty (1:5) steel floated hard and smooth 12 mm thick (minimum) 2 No. coat work generally to walls; vertical; internally	m2	168		
18.8.2	Ditto columns; vertical; internally	m2	19		
	PAINTING AND DECORATING One coat CROWN 'solo' or other equal and approved undercoat including skimming surfaces to smoothen them using approved filler and sanding to smooth surface; approved colour; two coats CROWN 'solo' or other equal and approved pure satin emulsion; approved colour; applied in accordance with manufacturer's printed instruction Steel trowelled plastered surfaces of wall; internally Total for Internal Wall Finishes Carried Forward				
18.8.3	Brought Down Walls; vertical; internal	m2	168		
18.8.4	Columns; vertical; internal	m2	19		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	TOTAL FOR SERVICE BUILDING INTERNAL WALL FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 18				
18.9.1	<u>ELEMENT NO 9</u> <u>FLOOR FINISHES</u> BEDS OR BACKINGS Screed; cement and sand (1:4) 20 mm thick one coat beds; wood floated; to concrete BEDS OR BACKINGS Extra Over Concrete for 50 mm thick top layer power float finish treated with "Mapetop N AR6" from "Mapei Construction Chemicals" or other equal and approved hardener applied to manufacturer's printed instructions Floors; horizontal; internal TOTAL FOR SERVICE BUILDING FLOOR FINISHES CARRIED FORWARD TO SUMMARY OF BILL NO. 18	m2	70		
1	Bill No. 18				
2	SERVICE BUILDING				
3	<u>BILL SUMMARY- SERVICE BUILDING</u>				
4	SUBSTRUCTURES				
5	FRAME				
6	ROOFING				
7	INTERNAL WALLING				
8	DOORS AND ASSOCIATED FINISHES				
9	WINDOWS AND ASSOCIATED FINISHES				
	EXTERNAL WALL FINISHES				
	INTERNAL WALL FINISHES				
	FLOOR FINISHES				
	Carried to Final Summary				
	Bill No. 18				
	SERVICE BUILDING				

19. BILL NO. 19 : LANDSCAPING

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 19 : LANDSCAPING				
	<u>SOFT LANDSCAPING</u>				
	<u>Site Clearance and Excavations</u>				
19.1.1	Clear the site of all unwanted wastes including existing unwanted plant materials, grubbing up their roots and excavate oversite commencing from ground level, average 300 mm deep top soil to remove all turf, weeds and any deleterious materials; including carting away all arising wastes, raking and fine levelling of the ground.	SM	1,000		
19.1.2	Manually uproot all grass based weeds and cart away from site.	SM	1,000		
	<u>Top Dressing to All Lawn areas</u>				
19.1.3	Supply approved good quality red/loam soil for top dressing all lawn areas as directed by the landscape Engineer ; Average depth =50mm.	CM	50		
	<u>Supply and Application of Fertilizer</u>				
19.1.4	Supply Mavuno Planting Fertilizer (NPK 10:26:10 + TE) or equally approved and apply to manufacturers specifications	Kg	50		
19.1.5	Supply Mavuno Top Dressing +SULPHUR+CALCIUM in Nitrogen fertilizers (>20% N) or equally approved and apply to manufacturers specifications	Kg	50		
	<u>INSTALLATION OF GRASS (GRASSING):</u>				
	<u>Supply, plant, water, weed and tend well undermentioned grass species till full establishment. Grass should also be rolled with a light weight roller to even out 'bumpy' areas. This should be carried out one to two weeks after installation.</u>				
19.1.6	Arabic grass sprigs spaced at 100mm centres, both ways	SM	500		
19.1.7	Pennisetum setaceum Kikuyu grass sprigs spaced at 100mm centres, both ways	SM	500		
	<u>INSTALLATION OF SMALL & LARGE GROUNDCOVERS:</u>				
	<u>Pits excavation for Small Groundcovers</u>				
19.1.8	Excavate circular pits, average 300mm diameter, commencing at existing ground level but not exceeding 0.45 metres depth average 300mm deep.	CM	100		
	<u>Backfilling of Planting Pits:</u>				
19.1.9	Backfill excavated planting pits with approved imported red/loam soil mixed with farmyard manure at the ratio 3:1, 350mm deep.	CM	50		
	<u>Planting of Small Groundcovers (Approx. 1,545 No.)</u>				
	<u>Supply, plant, weed, water and tend well under-mentioned Assorted species of groundcovers till full establishment;</u>				
	<u>Small Groundcovering Plants:</u>				
19.1.10	<i>Agapanthus africanus</i> AFRICAN LILY)- 'Blue' flowers	No	40		
19.1.11	<i>Barleria cristata</i>	No	40		
	Carried to Collection				
	<u>INSTALLATION OF SMALL & LARGE GROUNDCOVERS:</u>				
19.1.12	<i>Echeveria elegans</i>	NO	40		
19.1.13	<i>Euphorbia mili</i> (CROWN OF THORNS)	NO	15		
19.1.14	<i>Gazania</i> spp	NO	40		
19.1.15	<i>Guzmania bromeliads</i> (BROMELIADS)	NO	10		
19.1.16	<i>Hedera helix</i> (ENGLISH IVY) - Var.'	NO	40		
19.1.17	<i>Haemerocalis fulva</i> (DAY LILY)	NO	40		
19.1.18	<i>Ivoerus</i> spp.	NO	40		
19.1.19	<i>Kalanchoe blossfeldiana</i>	NO	40		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
19.1.20	Lampranthus protractus (ICE PLANT)	NO	40		
19.1.21	Lavendula officinalis (ENGLISH LAVENDER)	NO	40		
19.1.22	Liriope muscari (LIRIOPE GRASS)	NO	40		
19.1.23	Ophiopogon japonicus (MONDO GRASS)	NO	40		
19.1.24	Sedum rubrotinctum	NO	40		
19.1.25	SNOW MOUNTAIN	NO	40		
19.1.26	Tradescantia spathacea (MOSES PLANT)	NO	40		
	<u>INSTALLATION OF SHRUBS:</u>				
	<u>Pits excavation for Shrubs - (Approx. 519 No. Pits)</u>				
19.1.27	Excavate circular pits, average 600mm diameter, commencing at existing ground level but not exceeding 1.5 metres depth, average 600mm deep. deep and cart away excavated material arising.	CM	20		
	<u>Backfilling of Planting pits</u>				
19.1.28	Backfill excavated planting pits with approved imported red/loam soil mixed with farmyard manure at the ratio 3:1, 600mm deep.	CM	20		
	<u>Planting of Shrubs (Approx. 348 No.)</u>				
	<u>Supply, plant, weed, water and tend well under-mentioned Assorted species of Shrubs till full establishment;</u>				
19.1.29	Agave attenuata (AMERICAN AGAVE)	NO	15		
19.1.30	Abutilon malritarum	NO	10		
	Carried to Collection				
19.1.31	Breynia nivos	NO	15		
19.1.32	Brunfelsia pauciflora (YTT)	NO	10		
19.1.33	Yucca aloifolia	NO	15		
19.1.34	Cycas revoluta (JAPANESE CYCAD)	NO	2		
19.1.35	Hamelia patens (FIRE BUSH)	NO	15		
19.1.36	Heliconia rostrata	NO	10		
19.1.37	Hibiscus rosasinensis (YELLOW)	NO	10		
19.1.38	Pennisetum setaceum (RED)	NO	10		
19.1.39	Pennisetum setaceum (WHITE)	NO	10		
19.1.40	Phormium tenax (GIANT)	NO	5		
19.1.41	Phormium tenax (RED)	NO	5		
19.1.42	Strelitzia reginae (BIRDS OF PARADISE)	NO	10		
	<u>INSTALLATION OF TREES:</u>				
	<u>Pits excavation for Trees</u>				
19.1.43	Excavate pits, 1000x1000mm, commencing at existing ground level but not exceeding 1.5 metres depth aver. 1000mm deep and cart away excavated material arising.	NO	20		
	<u>Backfilling of Planting pits</u>				
19.1.44	Backfill excavated planting pits with approved imported red/loam soil mixed with farmyard manure at the ratio 4:1, 1000mm deep.	NO	20		
	<u>Planting of Trees</u>				
	<u>Supply, plant, weed, water and tend well undermentioned 150 No. trees/large shrubs till full establishment and support the same with strong bamboo stakes, adequate in thickness for each tree (generally between 30 and 50 mm diameter)</u>				
	<u>Ordinary Trees/Large Shrubs (52No.)</u>				
9.1.45	Jacaranda mimosifolia	NO	2		
9.1.46	Roystonea regia (ROYAL PALM)	NO	2		
9.1.47	Chrysalidocarpus lutescens (GOLDEN CANE PALMS)	NO	2		

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
9.1.48	Cupressus sempervirens (ITALIAN CYPRESS)	NO	2		
9.1.49	Filicium deciepens (THIKA PALM)	NO	2		
9.1.50	Calodendrum capense (CAPE CHESTNUT)	NO	2		
9.1.51	Schinus terebinthifolius (BRAZILLIAN PEPPER TREE)	NO	2		
	Carried to Collection				
9.1.52	<u>OTHER REQUIREMENTS:</u> <u>Landscape Maintenance:</u> Provide landscape maintenance service to the landscaped garden for six (6) months upon practical completion in order to monitor plants growth; Maintenance works for plants and grass shall include; watering, weeding, spraying against pests and diseases, and mowing grass to acceptable height as outlined in the Landscape Specification document. Carried to Collection	SM	1,000		
	Bill No. 19 LANDSCAPING <u>BILL SUMMARY- LANDSCAPING</u> Total Brought Forward from Page No. Carried to Final Summary Bill No. 19 LANDSCAPING		Page No. 19/1 19/2 19/3 19/4		

20. BILL NO. 20: SIGNAGE

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 20: SIGNAGE				
	<u>The following in brushed alucobond branding direct UV print</u>				
	<u>Floor Markings</u>				
20.1.1	400 x 400 mm floor markings	NO.	10		
	<u>Washroom Signages</u>				
20.1.2	150 x 150 mm 'LADIES' signage	NO.	30		
20.1.3	Ditto 'GENTS'	NO.	30		
20.1.4	Ditto 'DISABLED'	NO.	10		
	<u>Door Signages</u>				
20.1.5	500 x 100 mm door signage	NO.	75		
	<u>Fire Exit Signages</u>				
20.1.6	300 x 150 mm 'FIRE EXIT' signage	NO.	10		
	<u>Fire Action Sign</u>				
20.1.7	A3 Size 'FIRE ACTION' sign	NO.	10		
	<u>Evacuation Plan</u>				
20.1.8	A2 Size Evacuation Plan	NO.	4		
	<u>Directory Board</u>				
20.1.9	2,550 x 1,550 mm Block A directory board	NO.	1		
20.1.10	2,530 x 1,750 mm Block B directory board	NO.	1		
	<u>Main Signage</u>				
20.1.11	6000 mm x 2000 mm x 100 mm Thick self standing illuminated 'UVUVI HOUSE' signage to Engineer's approval.	NO.	1		
	Carried to Final Summary				
	Bill No. 20				
	SIGNAGE				

21. BILL NO. 21 : CIVIL WORKS & PARKING

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 21 : CIVIL WORKS & PARKING				
	ELEMENT NO. 1				
	ROADS AND PARKING				
	Site Preparation				
21.1.1	Clear site of all bushes, shrubs, small trees, grub up roots and remove from site	m2	850		
	EXCAVATION AND EARTH WORKS				
21.1.2	Excavate oversite soil average 150 mm deep and cart away from site	m2	850		
	Bulk excavation; starting from reduced level:-				
21.1.3	Not exceeding 1.5m deep	m3	255		
	DISPOSAL				
	Surplus excavated materials				
21.1.4	Load and cart away surplus excavated material from site to contractors approved tipping area off site	m3	255		
	FILLING				
	Hardcore				
	Supply approved hardcore on site or other equal and approved base material in making up levels.				
21.1.5	Over 300mm thick; depositing and compacting in layers maximum 150 mm thick.	m3	255		
	Stone or quarry dust				
	Blinding surfaces of fill				
21.1.6	50 mm thick	m2	850		
	Applied Floor Finishes				
	Supply and fix precast concrete paving slabs squared/staggered pattern bedded on cement mortar (1:4) on R.C. concrete slab total thickness Total thickness: 40mm.				
21.1.7	600 x 300 x 6mm thick to covered walkways	m2	150		
	80mm thick heavy duty cabro paving blocks (minimum crushing strength of 60N/mm2 irrespective of shape)				
21.1.8	laid on and including 50mm thick river sand / quarry sand bed laid to falls (2.5% in approved direction) and crossfalls in approved herringbone bond pattern to the satisfaction of the Engineer	m2	650		
	Supply and fix 600 x 600 x 50mm thick medium density precast concrete paving slabs laid on, and including, 50mm thick sand bed as per the manufacturers instructions	m2	50		
	Kerbs & Channel				
	Precast concrete class 20 finished fair on all exposed surfaces, bedded, jointed and pointed in cement and sand (1:5) mortar				
21.1.9	250 x 125mm edge restraint kerb and channel including 325 x 100 mm concrete class "P" bed with similar haunching to sides including haunching and bedding as per the Engineer's details and all necessary excavation and formwork	m	120		
21.1.10	Ditto but curved on plan	m	50		
	TOTAL FOR ROADS AND PARKING CARRIED FORWARD TO SUMMARY OF BILL NO. 21				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO. 2				
	EXTERNAL DRAINAGE				
	SURFACE WATER DRAINAGE				
21.2.1	Excavations Including Maintaining & Supporting Sides & Keeping Free From Water, Mud & Fallen Materials Excavations 0 - 1.5m for Bulk excavation to reduce levels	m3	120		
	DISPOSAL				
21.2.2	Surplus excavated materials Load and cart away surplus excavated material from site to contractors approved tipping area off site	m3	120		
	Precast concrete invert block drains <u>Invert blocks storm water drains bonded and jointed with cement, sand screed with removable cover slabs with perforations as necessary including quarry dust bed and concrete bed to appropriate fall, all laid to withstand vehicular traffic [Rate to include excavation, backfilling, tamping & compacting bottoms/ sides of excavations, making good disturbed surroundings, disposal of surplus soil and connection to gulleys]</u>				
21.2.3	600mm diameter x 450 x 225mm storm drains	m	75		
21.2.4	150mm diameter x 450 x 225mm storm drains	m	50		
	Open channel drain with grating Reinforced concrete channel drain consisting of 600 deep (internally) x 300mm wide x 150mm thick drain with 300mm wide mild steel grating cover comprising T25 bars welded at 50mm centers to 25 x 25 x 6mm angles welded on 75x75x6mm angle frame each unit fabricated in lengths not exceeding 2.0m Concrete in class 25 concrete waterproofed with 'Sika' additive or other equal and approved (Rate to include cost of all excavations, concrete, formwork, reinforcement, and associated works)	m	20		
21.2.5					
21.2.6	Culverts Head walls overall length 1410m long x 1325mm deep with 200mm thick walling masonry stone bedded and bonded with cement sand mortar 1:3 stone surfaces neatly plastered. [Rate to include all all excavation, mass concrete base back filling and connection to culvert pipe or open drain channel and make good all surroundings]	No.	8		
	Precast concrete pipe complete on 50mm thick mass concrete blinding and 150mm thick concrete surround [Rate to include concrete surround fill, excavation, backfilling and making good surroundings]				
21.2.7	600mm internal diameter precast concrete pipes	m	25		
21.2.8	450mm internal diameter precast concrete pipes	m	15		
	TOTAL FOR SURFACE WATER DRAINAGE CARRIED FORWARD TO SUMMARY OF BILL NO. 21				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	ELEMENT NO. 3				
	FOUL WATER DRAINAGE				
21.3.1	Excavations Including Maintaining & Supporting Sides & Keeping Free From Water, Mud & Fallen Materials Excavations 0 - 1.5m for Bulk excavation to reduce levels	m3	100		
	DISPOSAL				
21.3.2	Surplus excavated materials Load and cart away surplus excavated material from site to contractors approved tipping area off site	m3	100		
21.3.3	Excavate trenches in compacted backfilled material for foul water pipework maximum average depth not exceeding 1000mm to appropriate falls, tamp bottom of trenches and set aside excavated materials for backfilling or disposal as appropriate. [Rate to include making good disturbed surroundings, disposal of surplus soil and connection of pipework (ms) to manholes inspection chambers] 300mm diameter pipes	m	100		
21.3.4	Foul water pipework Heavy duty PVC waste water pipe on 50mm thick mass concrete blinding and 150mm thick concrete surround [Rate to include concrete surround fill, excavation, backfilling and making good surroundings]	m	50		
21.3.5	300mm internal diameter pvc pipes	m	50		
	150mm internal diameter pvc pipes	m	50		
	Manholes The following manholes of various sizes to be executed in accordance with the Engineer's drawings, average depths as stated complete and including filling, 150mm thick concrete walling, 150mm thick concrete floor slab Class 20, concrete benching Class 15, 20mm diameter cast iron stepping irons where necessary, internal and external finishes, surfaces waterproofed with "Sika-1" or "Cemflex" compounds to manufacturer's specification and complete with and including heavy duty double air seal cover and frame, all to Engineer's details. (Rate to include cost of all excavations, concrete, formwork, reinforcement, and associated works)				
21.3.6	Internal dimensions: 600x 600x 600mm deep	No.	5		
21.3.7	Internal dimensions: 1200x 1200x 1000mm deep	No.	5		
	Inspection chambers The following inspection chambers of various sizes to be executed in accordance with the Engineer's drawings; average depths as stated complete and including filling, 150mm thick masonry work, 150mm thick concrete floor slab Class 20, concrete benching Class 15, 20mm diameter cast iron stepping irons where necessary, internal and external finishes, heavy duty double air seal cover and frame, all to engineer's details. (Rate to include cost of all excavations, concrete, formwork, reinforcement, and associated works)				
	Total for External Wall Finishes Carried Forward				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
21.3.8	Brought Down Internal dimensions: 600x 600x 1000mm deep	No.	5		
21.3.9	Gulley traps Supply and lay 1130 x 980 x 900mm deep gulley traps complete with 1150 x 1000 x 10mm thick mild steel grating welded to 10mm thick mild steel frame at 30mm centres, hot galvanized and painted to approval [Rate to include excavation, 150mm thick plastered masonry walls, concrete base, concrete cover too receive grating and all surface finishes].	No.	5		
	Carried to Collection				
	Bill No. 21 CIVIL WORKS & PARKING <u>BILL SUMMARY- CIVIL WORKS & PARKING</u>				
	Total Brought Forward from Page No.				
	Carried to Final Summary				
	Bill No. 21 CIVIL WORKS & PARKING				

22. BILL NO. 22: DAYWORKS

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	BILL NO. 22: DAYWORKS				
	<u>The dayworks rates priced below should include all overheads and profits</u>				
	<u>Provision of labour</u>				
22.1.1	Porter	Hrs	10		
22.1.2	Semi-skilled	Hrs	10		
22.1.3	Mason/	Hrs	10		
22.1.4	Steel fixer	Hrs	10		
22.1.5	Carpenter	Hrs	10		
22.1.6	Painter	Hrs	10		
22.1.7	Tile fixer	Hrs	10		
22.1.8	Welder/Electrician	Hrs	10		
22.1.9	Foreman	Hrs	10		
22.1.10	Carpenter for joinery	Hrs	10		
22.1.11	Plumber	Hrs	10		
22.1.12	Electrician	Hrs	10		
22.1.13	Plumber	Hrs	10		
22.1.14	Electrician	Hrs	10		
	<u>Provision of plant</u>				
	<u>Any plant to be provided must be in good working condition. The day works rate provided must be inclusive of all running costs and overheads</u>				
22.2.1	Lorry (minimum 8 tonne capacity - or similar)				
22.2.2	Tipper (8 tonne capacity - or similar)	Hrs	5		
22.2.3	Compressor	Hrs	5		
22.2.4	Roller	Hrs	5		
22.2.5	Plate compactor	Hrs	5		
22.2.6	Wheel loader	Hrs	5		
22.2.7	Grader	Hrs	5		
22.2.8	Crawl loader	Hrs	5		
22.2.9	Jack hammer	Hrs	5		
22.2.10	Bending machine	Hrs	5		
22.2.11	Dragline	Hrs	5		
22.2.12	Sand blast machine	Hrs	5		
22.2.13	Dewatering pump	Hrs	5		
22.2.14	Concrete mixer	Hrs	5		
22.2.15	Dumper	Hrs	5		
22.2.16	Hand tools (power drills, grinders, torque wrenches, etc.)	Hrs	5		
22.2.17	Excavator	Hrs	5		
22.2.18	Bulldozer	Hrs	5		
22.2.19	Motor grade	Hrs	5		
22.2.20	Roller	Hrs	5		
22.2.21	Portable generator	Hrs	5		
22.2.22	3-Phase power generator	Hrs	5		
22.2.23	Vibrator	Hrs	5		
22.2.24	Hoist	Hrs	5		
	Carried to Collection				

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
	<u>Provision of material</u> <u>Any materials to be provided must be of good quality and upto standard for use in permanent works. The rate provided must be inclusive of all delivery costs and overheads</u>				
22.3.1	Ordinary portland cement @ 50kg bags	Bags	10		
22.3.2	Clean river sand	Tons	10		
22.3.3	12-20mm graded course aggregate	Tons	10		
22.3.4	Manufactured sand / Quarry dust / 0-6mm aggregate	Tons	10		
22.3.5	Graded crushed stone (crusher run - 0 to 60mm)	Tons	10		
22.3.6	Murram	Tons	10		
22.3.7	Hardcore	Tons	10		
22.3.8	Redsoil	Tons	10		
22.3.9	Reinforcement steel	Kg	100		
22.3.10	Sawn timber 100 x 50mm	m	10		
22.3.11	Ditto 150 x 50mm	m	10		
22.3.12	6mm thick clear glass	m2	10		
22.3.13	Water	lts	100		
22.3.14	Diesel fuel	lts	10		
	Carried to Collection				
	Bill No. 22 DAYWORKS <u>BILL SUMMARY- DAYWORKS</u> Total Brought Forward from Page No. Carried to Final Summary Bill No. 22 DAYWORKS		Page No. 22/1 22/2		

23. BILL NO. 23: ESMP

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
23.1.1	<p>BILL NO. 23: ESMP</p> <p><u>PRELIMINARIES FOR HEALTH AND SAFETY, AIR AND NOISE MONITORING & CONTROL, WASTE MANAGEMENT</u></p> <p><u>SANITATION OF THE WORKS</u></p> <p>The sanitation of the works shall be provided, maintained and removed on completion by the Contractor to the satisfaction of the Engineers, health department and local Authorities.</p> <p>The sanitation shall be for the use by Contractors and sub- Contractors workmen etc without charge. The Latrine/toilet shall be enclosed plastered and painted masonry wall, corrugated sheets roofs ,with concrete tiled floors to facilitate washing. Their location shall be agreed with the Engineers and the works shall not be commenced before the sanitary accommodation has been approved by the above mentioned authorities.</p> <p>The Contractor will be required to pay all conservancy charges and shall ensure clean daily maintenance and disinfecting of the latrines/toilet, and not less than once per week, the whole area shall be sprayed with disinfectant and insecticides and any temporary drains shall be removed and all works and surfaces disturbed made good and then the whole area disinfected and left clean and free from pollution to the satisfaction of the Engineer and local authorities.</p>	Item	1	3,000,000.00	
23.1.2	<p><u>SAFETY, HEALTH AND WELFARE OF WORKERS</u></p> <p>The Contractor shall allow for providing for the safety, health and welfare of work people and for complying with any relevant Ordinances, Regulations or Union Agreement</p> <p>In addition to complying with the requirements of the Occupational Safety & Health Act 2007 and the Factories Act, the Contractor and Sub-Contractors shall be required to comply in all respects with the Factories (Building Operations and Work of Engineering Construction) rules together with the Construction Safety Plan in compliance with International Labour Organizations (ILO) Regulations.</p> <p>The Contractor will further be required to identify a Site Safety Officer in accordance with the above Rules who will be responsible for the health and safety of workers on the site.</p> <p>The Contractor will also be required to provide approved good quality hard hats, gumboots and other necessary protective gear for all workers on site including Sub-Contractors' workers and also for the exclusive use by the Clerk of Works and representatives of the Employer and Consultants.</p> <p>Carried to Collection</p>			Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
23.1.3	<p>The Tenderer's attention is drawn to the fact that the Employer reserves the right to hold back the amount priced against this Clause either in full or in part due to any non-performance on the Contractor's part of his obligations under this Clause.</p> <p>The tenderer's attention is further drawn to the fact that he is required to submit with his tender a detailed write-up on how he intends to implement the above Construction Safety Plan. It should be noted that this write-up will form a heavily weighted criteria in the evaluation of the tenders. Adequate temporary Notices and Signs shall be posted to indicate e.g. that "building operations are in progress" and "entry is at ones own risk" or "trespassers are liable to be prosecuted" or such other Notices and Signs as the Engineer may consider necessary from time to time. The design and location of such signs will be to the approval of the Engineer.</p> <p>PREVENTION OF DISTURBANCE AND NUISANCE</p> <p>Tenderers should note that normal activities shall be continuing in the surrounding buildings during the construction period.</p> <p>Minimum disturbance by noise, dust, water or movement of vehicles, materials, labour or plant must be caused to the function of the existing adjacent buildings in the vicinity and the occupants and staff therein. The Contractor shall comply with all instructions issued by the Employer or Engineer with regard to minimizing such disturbances. The Contractor shall not directly or indirectly or otherwise by himself or through his agents cause nuisance. Should he do so he shall be directly responsible for such acts.</p> <p>The works and such sections of the site necessary shall be under the entire care and control of the contractor during the whole period of the contract and shall take all possible precautions to prevent any nuisance, inconvenience or injury to the holder or occupiers of the existing or surrounding properties and to the public generally, and shall at all times keep all paths and roads affected by the works in a safe and clear state, and shall use proper precautions to ensure the safety of all wheeled traffic and pedestrians.</p>	Item	1	3,000,000.00	
	<p>CLEANING, REMOVAL OF PLANT AND RUBBISH ETC</p> <p>The Contractor shall upon completion of the works remove and clear away all temporary buildings, scaffolding, plant, rubbish and unused materials, surplus excavated materials and shall leave the whole of the site of the works in a clean and tidy state to the satisfaction of the Engineer, including clearing away and making good all traces of dirt. Carried to Collection</p>	Item	1	2,000,000.00	
23.1.4				Ksh	

Item	Description	Unit	Qty	Rate (Kes)	Amount (Kes)
23.1.5	Particular care shall be taken in leaving windows, floors and fittings clean and the removal of all paint and cement stains therefrom. He shall also remove all rubbish and dirt from the site as it accumulates or as directed by the Engineer. The Contractor is to find his own dump and shall pay all charges in connection therewith.	Item	1	2,000,000.00	
	AMBIENT AIR QUALITY AND NOISE MONITORING				
	The Contractor to carry out continuous monitoring of the ambient air quality and Noise measurements as well as vibration monitoring on quarterly basis during the construction phase and this should be done at different weather and seasons to ensure that all the weather patterns are taken into consideration during the monitoring process.	Item	1	1,000,000.00	
23.1.6	ENVIRONMENTAL MANAGEMENT PLAN				
	EMP, Environmental and other related assessments Carried to Collection	Item	1	9,000,000.00 Ksh	
	Bill No. 23 ESMP <u>SECTION SUMMARY- ESMP</u>				
	Total Brought Forward from Page No.		Page No. 23/1		
			23/2		
			23/3		
	Carried to Final Summary			Ksh	
	Bill No. 23 ESMP				

24. BILL 24: ELECTRICAL INSTALLATIONS

BILL 24: ELECTRICAL INSTALLATIONS					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.1.0	PRELIMINARIES & CONDITIONS OF CONTRACT				
24.1.1	Allow for preparation of all "shop" drawings and submitting to the Engineers for approval prior to commencement of work on site	1	Item		
24.1.2	Arrangement for all inspections and tests of the installation that may be required by the Engineer/Client and shall provide all instruments and equipment required for these tests	1	Item		
24.1.3	Allow for preparation of all "As Built" Drawings immediately after Practical Completion of the works.	1	Item		
24.1.4	Allow for the preparation of all "Operations & Maintenance Manuals" immediately after Practical Completion of the works.	1	Item		
24.1.5	Allow for on-site Training of the Operators for specialised equipment	1	Item		
Total Carried to Electrical Summary Page					
24.2.0	INCOMING POWER				
	KPLC RELATED WORKS				
24.2.1	Allow a P.C. sum(Ksh.8,000,000) for capital contribution towards KPLC incoming supply line and transformer arrangement in to the transformer room and improvements of feeds and new terminations of cut - outs and meters and extension of underground line and all new installations as necessary.	1	Sum		
24.2.2	150mm diameter Heavy gauge duct for incoming underground H.V. cables with 1:3:6 concrete surround	300	M		
24.2.3	900 x 900 x 900 concrete manhole complete with Manhole covers and Hatari(Danger) Sign indelibly engraved at the top	4	No.		
24.2.4	Hatari(Danger) sign concrete slabs	4	No.		
24.2.5	Attendance on Kenya Power and Lighting Co. Ltd.	1	Sum		
24.2.6	Complete Earthing system to KPLC requirements	1	Sum		
24.2.7	Any other item to complete the installation in this section.		Sum		
Total Carried to Electrical Summary Page					
					Amount
Item	Description	Qty.	Unit	Rate (Kes)	Shs.
24.3.0	MAIN POWER DISTRIBUTION				
24.3.1	Main Supply Intake Panel				
	Supply, install and commission:-		Item		
24.3.2	Low Voltage Switch Board as per the specifications 4 x 150mm dia. Heavy gauge pvc duct complete with draw wire from Switch Room to Electrical closet in Ground Floor	100	M		

24.3.3	Trenching , sifting and backfilling the 750mm deep trench after laying the above ducts including compaction	100	M		
24.3.4	900 x 900 x 900 concrete manhole complete with Manhole covers and Hatari(Danger) Sign indelibly engraved at the top	2	NO		
	Total Carried to Electrical Summary Page				
24.4.0	SUB MAIN BOARDS AND CABLES Supply and install the following complete as specified: Normal rising main 800A TPN 4 pole rectangular copper busbar complete with cable termination, feed in units, tap off units, brackets, fire barriers and end cover from ground floor to eleventh floor as shown in the contract drawings	45	LM		
24.4.1	Surface mount powder coated, Form 3B Essential Loads Sub Main Board, Comprising of:- 400A TP MCCB, 3No.indicating lambs with 8No. 100A TP MCCB, nd 2No. blanked/Spare Ways	1	No.		
24.4.2	Sub-main cable; 150mm ² PVC/SWA/PVC 4 core armoured copper cable , inclusive of all cable lugs, glands and shrouds. (Incomers from Main Board to Essential Loads Sub Main Board)	180	M		
24.4.3	400mm ² PVC/SWA/PVC single core armoured copper cable from KPLC transformer to; Generator and the main switchboard complete with cable glands and lugs as shown in the contract drawing.(total length)	350	M		
24.4.4	300mm ² PVC/SWA/PVC 4 core armoured copper cable from main switchboard to Main Riser (total length)	150	M		
24.4.5					
	Total Carried to Electrical Summary Page				
24.5.0	BASEMENT Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	156	No.		
24.5.1					
	Total Carried to Next Page				
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.5.2	Total bf from previous page				
24.5.2.1	Luminaires as listed below:-				
24.5.2.1	DL	11	No.		
24.5.2.2	A5	109	No.		
24.5.2.3	ST	2	No.		
24.5.2.4	Exit	10	No.		

24.5.2.5	Em	15	No.		
24.5.2.6	S	4	No.		
24.5.2.7	WB	5	No.		
24.5.3	POWER				
24.5.3.1	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	1	No.		
24.5.3.2	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board in ground floor to consumer unit	80	M		
24.5.3.3	32A SPN, 230V Isolator	2	No.		
24.5.3.4	6mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	80	M		
24.5.3.5	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	12	No.		
24.5.3.6	Provisions for points including laying of conduits and provision of outlet boxes for the following:				
	(i) Surveillance Cameras	10	No.		
	(ii) Fire Alarm & Detection System	20	No.		
	(iii) Data Points	8	No.		
Total Carried to Electrical Summary Page					
24.6.0	<u>GROUND FLOOR</u>				
	Supply and install the following:-				
	Lighting				
24.6.1	All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameter HG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	440	No.		
Total Carried to Next Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount
	Total bf from previous page				Shs.
24.6.2	Luminaires as listed below:-				
24.6.2.1	DL	105	No.		
24.6.2.2	DL1	70	No.		
24.6.2.3	FL	60	No.		
24.6.2.4	C	55	No.		
24.6.2.5	ST	10	No.		
24.6.2.6	Exit	18	No.		
24.6.2.7	Em	36	No.		
24.6.2.8	S	6	No.		
24.6.2.9	WB	25	No.		
24.6.2.10	C300	55	No		
24.6.3	POWER				
24.6.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		

24.6.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.6.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	180	M		
24.6.3.4	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.6.3.5	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	80	M		
24.6.3.6	32A SPN, 230V Isolator	8	No.		
24.6.3.7	6mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	320	M		
24.6.3.8	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	180	No.		
Total Carried to Next Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
	Total bf from previous page				
24.6.3.9	FACP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Control Panel with 13A fused, switched DP control switch	1	No.		
24.6.3.10	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	6	No.		
24.6.3.11	400 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	340	M		
24.6.3.12	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	400	M		
24.6.3.13	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.6.3.14	Provisions for points including laying of conduits and provision of outlet boxes for the following:				
	(i) Surveillance Cameras	20	No.		
	(ii) Fire Alarm & Detection System	120	No.		
	(iii) Data Points	100	No.		
Total Carried to Electrical Summary Page					
24.7.0	FIRST FLOOR Supply and install the following:- Lighting				

24.7.1	All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	468	No.		
24.7.2	Luminaires as listed below:-				
24.7.2.1	DL	210	No.		
24.7.2.2	DL1	26	No.		
24.7.2.3	FL	40	No.		
24.7.2.4	C1	63	No.		
24.7.2.5	ST	10	No.		
Total Carried to Next Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
	Total bf from previous page				
24.7.2.6	Exit	20	No.		
24.7.2.7	Em	75	No.		
24.7.2.8	S	6	No.		
24.7.2.9	C2	18	No.		
24.7.3	POWER				
24.7.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.7.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.7.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	120	M		
24.7.3.4	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.7.3.5	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	80	M		
24.7.3.6	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	80	No.		
24.7.3.7	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.7.3.8	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	2	No.		
24.7.3.9	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	340	M		
24.7.3.10	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	400	M		

24.7.3.11	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
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Total Carried Next to Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.7.3.12	Total bf from previous page Provisions for points including laying of conduits and provision of outlet boxes for the following: (i) Surveillance Cameras (ii) Fire Alarm & Detection System (iii) Data Points	20 80 60	No. No. No.		

Total Carried to Electrical Summary Page

24.8.0	SECOND FLOOR Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings Luminaires as listed below:-				
24.8.1	DL	273	No.		
24.8.2	DL1	50	No.		
24.8.2.1	DL	30	No.		
24.8.2.2	CR	60	No.		
24.8.2.3	C1	36	No.		
24.8.2.4	ST	7	No.		
24.8.2.5	Exit	4	No.		
24.8.2.6	Em	30	No.		
24.8.2.7	S	3	No.		
24.8.2.8	A4	10	No.		
24.8.2.9	A5	15	No.		
24.8.2.10	F	5	No.		
24.8.2.11	C2	23	No.		
24.8.3	POWER 10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.8.3.1	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.8.3.2					

Total Carried Next to Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.8.3.3	Total bf from previous page 25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	120	M		

24.8.3.4	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.8.3.5	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	60	M		
24.8.3.6	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	120	No.		
24.8.3.7	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.8.3.8	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	4	No.		
24.8.3.9	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	340	M		
24.8.3.10	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	200	M		
24.8.3.11	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.8.3.12	Provisions for points including laying of conduits and provision of outlet boxes for the following:				
	(i) Surveillance Cameras	6	No.		
	(ii) Fire Alarm & Detection System	60	No.		
	(iii) Data Points	70	No.		

Total Carried to Electrical Summary Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
24.9.0	<u>THIRD FLOOR</u>				
	Supply and install the following:-				
	Lighting				
24.9.1	All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	225	No.		
24.9.2	Luminaires as listed below:-				
24.9.2.1	DL	47	No.		
24.9.2.2	DL1	22	No.		
24.9.2.3	C1	65	No.		
24.9.2.4	ST	7	No.		
24.9.2.5	Exit	4	No.		
24.9.2.6	Em	31	No.		
24.9.2.7	S	3	No.		
24.9.2.8	A5	4	No.		
24.9.2.9	F	20	No.		
24.9.2.10	C2	22	No.		
24.9.3	POWER				

24.9.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.9.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.9.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	120	M		
24.9.3.4	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.9.3.5	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	60	M		

Total Carried Next to Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
	Total bf from previous page				
24.9.3.6	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	150	No.		
24.9.3.7	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.9.3.8	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	4	No.		
24.9.3.9	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	340	M		
24.9.3.10	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	300	M		
24.9.3.11	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.9.3.12	Provisions for points including laying of conduits and provision of outlet boxes for the following:				
		(i) Surveillance Cameras	10	No.	
		(ii) Fire Alarm & Detection System	60	No.	
	(iii) Data Points	60	No.		

Total Carried to Electrical Summary Page

24.10.0	FOURTH FLOOR				
	Supply and install the following:-				
	Lighting				
24.10.1	All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	280	No.		
24.10.2	Luminaires as listed below:-				

24.10.2.1	DL	40	No.		
24.10.2.2	DL1	32	No.		

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Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
	Total bf from previous page				
24.10.2.3	C1	72	No.		
24.10.2.4	ST	7	No.		
24.10.2.5	Exit	4	No.		
24.10.2.6	Em	35	No.		
24.10.2.7	S	6	No.		
24.10.2.8	A4	2	No.		
24.10.2.9	SP	40	No.		
24.10.2.10	F	20	No.		
24.10.2.11	C2	22	No.		
24.10.3	POWER				
24.10.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.10.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	2	No.		
24.10.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	100	M		
24.10.3.4	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.10.3.5	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	60	M		
24.10.3.6	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	150	No.		
24.10.3.7	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.10.3.8	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	4	No.		

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Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
24.10.3.10	Total bf from previous page 100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	300	M		

24.10.3.11	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.9.3.12	Provisions for points including laying of conduits and provision of outlet boxes for the following: (i) Surveillance Cameras (ii) Fire Alarm & Detection System (iii) Data Points	10 60 70	No. No. No.		
Total Carried to Electrical Summary Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.11.0	<u>FIFTH FLOOR</u> Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	216	No.		
24.11.1	Luminaires as listed below:-				
24.11.2	DL	30	No.		
24.11.2.1	DL1	25	No.		
24.11.2.2	C1	55	No.		
24.11.2.3	ST	7	No.		
24.11.2.4	Exit	4	No.		
24.11.2.5	Em	30	No.		
24.11.2.6	S	3	No.		
24.11.2.7	A4	2	No.		
24.11.2.8	A5	15	No.		
24.11.2.9	F	20	No.		
24.11.2.10					
Total Carried Next to Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.11.2.11	Total bf from previous page C2	25	No.		
24.11.3	POWER 10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCCBs as ABB or equal and approved	1	No.		
24.11.3.1	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCCBs as ABB or equal and approved	2	No.		
24.11.3.2	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	120	M		
24.11.3.3	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.11.3.4	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	60	M		
24.11.3.5	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal	150	No.		
24.11.3.6					

24.11.3.7	trunking complete with 13A twin socket outlet as shown on the drawing FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.11.3.8	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	4	No.		
24.11.3.9	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	160	M		
24.11.3.10	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	200	M		
24.11.3.11	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.11.3.12	Provisions for points including laying of conduits and provision of outlet boxes for the following: (i) Surveillance Cameras	6	No.		

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Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
	Total bf from previous page				
	(ii) Fire Alarm & Detection System	50	No.		
	(iii) Data Points	75	No.		

Total Carried to Electrical Summary Page

0

24.12.0	SIXTH FLOOR Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings				
24.12.1	Luminaires as listed below:-	168	No.		
24.12.2					
24.12.2.1	DL	22	No.		
24.12.2.2	DL1	16	No.		
24.12.2.3	C	62	No.		
24.12.2.4	ST	7	No.		
24.12.2.5	Exit	4	No.		
24.12.2.6	Em	29	No.		
24.12.2.7	S	3	No.		
24.12.2.8	C2	25	No.		
24.12.3	POWER				
24.12.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.12.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		

24.12.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	100	M		
24.12.3.4	6way 63A SPN CU as ABB complete with MCBs or equal and approved.	2	No.		
24.12.3.5	10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	60	M		

Total Carried Next to Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
	Total bf from previous page				
24.12.3.6	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	90	No.		
24.12.3.7	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.12.3.8	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	2	No.		
24.12.3.9	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	160	M		
24.12.3.10	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	200	M		
24.12.3.11	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.12.3.12	Provisions for points including laying of conduits and provision of outlet boxes for the following:				
	(i) Surveillance Cameras	6	No.		
	(ii) Fire Alarm & Detection System	50	No.		
	(iii) Data Points	70	No.		

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24.13.0	SEVENTH FLOOR Supply and install the following:-				
	Lighting				
24.13.1	All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	180	No.		
24.13.2	Luminaires as listed below:-				
24.13.2.1	DL	21	No.		

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Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.

	Total bf from previous page				
24.13.2.2	DL1	33	No.		
24.13.2.3	C	60	No.		
24.13.2.4	ST	7	No.		
24.13.2.5	Exit	4	No.		
24.13.2.6	Em	27	No.		
24.13.2.7	S	6	No.		
24.13.2.8	C2	22	No.		
24.13.3	POWER				
24.13.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.13.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.13.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	80	M		
24.13.3.4	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	50	No.		
24.13.3.5	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.13.3.6	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	2	No.		
24.13.3.7	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	160	M		
24.13.3.8	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	200	M		
24.13.3.9	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		

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Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.13.3.10	Total bf from previous page Provisions for points including laying of conduits and provision of outlet boxes for the following: (i) Surveillance Cameras (ii) Fire Alarm & Detection System (iii) Data Points	6 50 40	No. No. No.		
Total Carried to Electrical Summary Page					
24.14.0	<u>EIGHTH FLOOR</u> Supply and install the following:- Lighting				

24.14.1	All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings	195	No.		
24.14.2	Luminaires as listed below:-				
24.14.2.1	DL	22	No.		
24.14.2.2	DL1	26	No.		
24.14.2.3	C	51	No.		
24.14.2.4	ST	7	No.		
24.14.2.5	Exit	4	No.		
24.14.2.6	Em	25	No.		
24.14.2.7	S	6	No.		
24.14.2.8	SP	30	No.		
24.14.2.9	C2	24	No.		
24.14.3	POWER				
24.14.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.14.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.14.3.2	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	80	M		

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Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
	Total bf from previous page				
24.14.3.4	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	50	No.		
24.14.3.5	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.14.3.6	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	2	No.		
24.14.3.7	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	140	M		
24.14.3.8	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	200	M		
24.14.3.9	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.14.3.10	Provisions for points including laying of conduits and provision of outlet boxes for the following:				
	(i) Surveillance Cameras	6	No.		
	(ii) Fire Alarm & Detection System	50	No.		
	(iii) Data Points	40	No.		

Total Carried to Electrical Summary Page					
24.15.0	<u>NINTH FLOOR</u> Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings				
24.15.1	Luminaires as listed below:-	61	No.		
24.15.2	DL	14	No.		
24.15.2.1	DL1	12	No.		
24.15.2.2					

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Item	Description	Qty.	Unit	Rate (Kes)	Amount
					Shs.
	Total bf from previous page				
24.15.2.3	C	10	No.		
24.15.2.4	ST	2	No.		
24.15.2.5	Exit	2	No.		
24.15.2.6	Em	5	No.		
24.15.2.7	S	3	No.		
24.15.2.8	C2	13	No.		
24.15.3	POWER				
24.15.3.1	10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.15.3.2	10-Way 100A TPN Distribution Board complete with 100A TPN integral isolator complete with MCBs as ABB or equal and approved	1	No.		
24.15.3.3	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	40	M		
24.15.3.4	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	20	No.		
24.15.3.5	FARP: Outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit for the Fire Alarm Repeater Panel with 13A fused, switched DP control switch	1	No.		
24.15.3.6	HAND DRIERS: Hand drier outlet point wired in 3 x 2.5mm ² PVC insulated single core copper cables in 20mm HG PVC conduit with 13A fused, switched DP control switch	2	No.		
24.15.3.7	300 x 50mm galvanised steel factory fabricated Cable tray c/w all accessories	120	M		
24.15.3.8	100mm X 50mm double compartment Powder coated metal trunking as Almiria or equal and equivalent	180	M		
24.15.3.9	Fans outlet points wired in 3 x 2.5mm ² PVC insulated multistrand copper cables in 20mm HG PVC conduit with 13A fused, switched spur unit	6	No.		
24.15.3.10	Provisions for points including laying of conduits and provision of outlet boxes for the following:				

	(i) Surveillance Cameras	6	No.		
	(ii) Fire Alarm & Detection System	20	No.		
	(iii) Data Points	20	No.		
Total Carried to Electrical Summary Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.16.0	<u>SERVICE FLOOR</u> Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings				
24.16.1	Luminaires as listed below:-	5	No.		
24.16.2	F	6	No.		
24.16.2.1	S	3	No.		
24.16.3	POWER 10-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCCBs as ABB or equal and approved	1	No.		
24.16.3.1	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	30	M		
24.16.3.2	63A TPN, 230V Isolator	3	No.		
24.16.3.3	16mm ² XLPE/SWA/PVC 4 core armoured copper cable from distribution board to 3-phase isolators	30	M		
24.16.3.4	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	4	No.		
24.16.3.5					
Total Carried to Electrical Summary Page					
24.17.0	<u>POWER ROOM ELECTRICS</u> Supply and install the following:- Lighting All lighting points wired in 1.5mm ² PVC cu cables in 20mm diameterHG PVC conduit embedded in wall fabrics, roof structure and floor slabs complete with switches as shown on the contract drawings				
24.17.1	Luminaires as listed below:-	18	No.		
24.17.2	A4	12	No.		
24.17.2.1	S	6	No.		
24.17.2.2	POWER 6way 63A SPN CU as ABB complete with MCBs or equal and approved.	1	No.		
24.17.3					
24.17.3.1					
Total Carried Next to Page					
Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
	Total bf from previous page 10mm ² XLPE/SWA/PVC 3 core armoured copper cable from distribution board to single-phase isolators	25	M		
24.17.3.2					

24.17.3.3	All socket outlet points wired in 2.5mm ² PVC cable in conduit embedded in floor slabs and in metal trunking complete with 13A twin socket outlet as shown on the drawing	6	No.		
24.17.3.4	Provisions for points including laying of conduits and provision of outlet boxes for the following: (i) Surveillance Cameras (ii) Fire Alarm & Detection System	4 6	No. No.		

Total Carried Next to Electrical Summary Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.18.0	PROVISION FOR MECHANICAL SERVICES Supply and install the following:-				
24.18.1	6-Way 125A TPN Distribution Board complete with 125A TPN integral isolator complete with MCCBs as ABB or equal and approved	2	No.		
24.18.2	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	200	M		
24.18.3	SPN 20A, 240V Isolator wired in 4mm ² PVC cable in trunking as shown on the drawing	10	No.		
24.18.4	TPN 32A, 415V Isolator wired in 6mm ² 4C PVC cable in trunking as shown on the drawing	8	No.		
	AIR CONDITIONING				
24.18.5	10-Way 100A TPN Distribution Board complete with 125A TPN integral isolator complete with MCCBs as ABB or equal and approved	6	No.		
24.18.6	25.0 mm ² 4 core XLPE /SWA/FR CU cables c/w lugs and glands from Main Switch Board to distribution Board	480	M		
24.18.7	32A SPN 240V Isolators	40	No.		
24.18.8	6.0 mm ² 3 core XLPE /SWA/FR CU cables c/w lugs and glands from distribution board to isolators	2,400	M		

Total Carried to Electrical Summary Page

Item	Description	Qty.	Unit	Rate	Amount Shs.
24.19.0	UPS INSTALLATIONS Supply and install the following.				
24.19.1	50KVA UPS UNIT: UPS Unit c/w Battery back-up for 15 minute and the bypass switch	2	No.		
24.19.2	10KVA UPS UNIT: UPS Unit c/w Battery back-up for 15 minute and the bypass switch	2	No.		

Total Carried to Electrical Summary Page

24.20.0	<u>EARTHING AND LIGHTNING PROTECTION SYSTEM</u> Supply and install the following.				
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24.20.1	Earth Potential Copper Bar measuring 1200m long X 50mm Wide X 6mm Thick, mounted on insulators in room	8	No.		
24.20.2	Earth Potential Copper Bar measuring 600m long X 50mm Wide X 6mm Thick, mounted on insulators in room	8	No.		
24.20.3	16mm sq SC CU cable c/w appropriate cable glands, cable lugs	100	M		
24.20.4	95mm sq SC CU cable c/w appropriate cable glands, cable lugs	400	M		
24.20.5	Earth pits c/w earth matt and earth rods	8	No.		
24.20.6	Allow for bonding to all metallic structures to the earthing system.	1	LOT		
24.20.7	Air Termination including the spike terminal, copper rod and clamp	8	No.		
24.20.8	Down Conductor				
24.20.9	25 x 3mm copper tape	600	LM		
24.20.10	Tape clip	32	No.		
24.20.11	Junction clamp	32	No.		
24.20.12	38mm diameter HG PVC pipe	600	LM		
24.20.13	Testing Joints	8	No.		
	<u>Earth Termination</u>				
24.20.14	15mm diameter, 4 meter length Copper Earth rod to be buried a depth of 5m below ground and spaced horizontally 3.5 meters apart complete with copper mats	8	No.		

Total Carried Next to Page

Item	Description	Qty.	Unit	Rate (Kes)	Amount Shs.
24.20.15	Total bf from previous page				
24.20.16	Earth Treatment and Bonding	8	Item		
24.20.17	Testing and commissioning of all the installations	1	Lot.		
24.20.17	Any other item to complete installation in this section (specify)	Sum	Sum		

Total Carried to Electrical Summary Page

24.21.0	<u>AUTOMATIC VOLTAGE STABILIZER</u>				
24.21.1	Supply, Install test and commission the following 600kVA 50Hz 3 Phase voltage stabilizer as specified (+/-15%)	1	No.		
24.21.2	400mm ² PVC/SWA/PVC single core armoured copper cable runs laid in trench between the voltage stabilizer and the bypass switch panel within the main LV Switch board complete with cable glands and lugs	140	M		
24.21.3	70mm ² Earth continuity copper conductor enclosed in 38mm diameter HG PVC concealed conduit complete with fixings at the stabilizer, bypass and at the earthing mats including terminations	30	M		

Total Carried to Electrical Summary Page

24.22.0	FAÇADE LIGHTING & MOTION DETECTORS				
	FAÇADE LIGHTING				
	Supply, Install test and commission the following				
24.22.1	All switching lighting points in 20mm Ø. HG PVC conduits complete with draw wires concealed in building fabrics.	41	No.		
24.22.2	Motion detectors	60	No.		
Total Carried to Electrical Summary Page					
24.23.0	SOLAR SYSTEM FOR COMMON AREA				
24.23.1	265W, 30.6V Monocrystalline Panel as Felicity FL-M-265W model or equal and approved	36	No.		
24.23.2	12V, 200AH Deep Cycle Gel Battery as Felicity FL-G-200AH model or equal and approved	18	No.		
24.23.3	10KVA 3-phase Pure Sinewave Inverter as Felicity IVPL10048 model or equal and approved	1	No.		
Total Carried Next to Page					
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
24.23.4	120A, 24V MPPT Charge Controller as Felicity FL-SCCM-12048 or equal and approved	6	No.		
24.23.5	PV Combine Box as Felicity FL-CB-6x1 model or equal and approved	3	No.		
24.23.6	Battery Rack / Box	3	Lot		
24.23.7	Solar Panel Al. Bracket	3	Lot		
24.23.8	Cables & Accessories	3	Lot		
24.23.9	Installation, testing & commissioning	1	Lot		
Total Carried to Electrical Summary Page					
ITEM	DESCRIPTION				AMOUNT SHS.
24.24.0	ELECTRICAL SUMMARY PAGE				
24.24.1	Total for Preliminary & Conditions of Contract B/F				
24.24.2	Total for Incoming KPLC Power and Related Works B/F				
24.24.3	Total for Main Switch Board B/F				
24.24.4	Total for Sub Boards and Main Cables B/F				
24.24.5	Total for Basement Floor Installations B/F				
24.24.6	Total for Ground Floor Installations B/F				
24.24.7	Total for First Floor Installations B/F				
24.24.8	Total for Second Floor Installations B/F				
24.24.9	Total for Third Floor Installations B/F				
24.24.10	Total for Fourth Floor Installations B/F				
24.24.11	Total for Fifth Floor Installations B/F				
24.24.12	Total for Sixth Floor Installations B/F				
24.24.13	Total for Seventh Floor Installations B/F				
24.24.14	Total for Eighth Floor Installations B/F				
24.24.15	Total for Ninth Floor Installations B/F				
24.24.16	Total for Service Wing of Tenth floor Installations B/F				
24.24.17	Total for Power Room Electrics Installations B/F				

24.24.18	Total for Mechanical Provisions Installations B/F				
24.24.19	Total for UPS B/F				
Total Carried Next to Page					
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	Amount
					SHS.
	Total bf from previous page				
24.24.20	Total for Earthing and Lightning Protection B/F				
24.24.21	Total for AVR B/F				
24.24.22	Total for Façade and Motion sensors B/F				
24.24.23	Total for Solar for common area lighting B/F				
	Total Carried to Services Summary Page				

25. BILL 25: FIRE ALARM DETECTION & PUBLIC

BILL 25: FIRE ALARM DETECTION & PUBLIC ADDRESS

ITEM	DESCRIPTION	QTY.	UNIT	RATE (KSH)	AMOUNT (KSH)
25.1.0	<u>PRELIMINARIES & CONDITIONS OF CONTRACT</u>				
25.1.1	Allow for mobilization and setting up stores, tools and all necessary equipment on site	1	item		
25.1.2	Allow for supply and installation of all labels and danger warning notices, in all personal protective equipment's(PPEs)	1	item		
25.1.3	Allow for all preparation of all working drawings (3No. Sets of A2 drawings	1	item		
25.1.4	Allow for the supply and installation of all necessary consumables e.g. Cable makers, ties, etc.	1	Item		
Total Carried to Summary Page					

FIRE ALARM AND DETECTION

ITEM	DESCRIPTION	QTY.	UNIT	Rate (KSH)	Amount (KSh)
25.2.0	Supply and install the following:-				
25.2.1	Addressable Fire Alarm Control Panel, Ten loops, 150 detector&150 module per loop complete with following features and interface modules: fully networkable, MS interface, voice evacuation with built-in digital amplifier complete with power supply and charger, capability of IP network connection and as Notifier or equal and approved, networkable up to 100 panels/network, Capability of Speeching, Phone text alerts directly to key personnel with relevant devices, LCD display	1	Item		
25.2.2	Battery Backup with Sealed and maintenance-free, Overcharge protected, Easy handling with leakproof construction, Ruggedly constructed, high-impact case (ABS, polystyrene, or polypropylene, depending on models). Long service life and Compact design	2	No.		
25.2.3	Repeater addressable fire alarm panel complete with emergency batteries and complete with Module interface as Notifier or equal and approved.	3	No.		
25.2.4	Loop Control Module with with Up to 12,500 feet (3,810 m) on a Class B (Style 4) SLC loop (twisted-unshielded), Built-in degraded mode, plug-in style installation and Permits multiple loops in small enclosure.	4	No.		
25.2.5	Supply and installation of Fire Alarm Graphics System with visual display for monitoring and controlling of fire alarm system	1	Item		
Total Carried to Next Page					

					AMOUNT
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	SHS.
	Total bf from previous page				
25.2.6	RS485 Communication Module with Class A or Class B networking capability and Hi 485 High-integrity option for critical applications	3	No.		
25.2.7	Supply and Install the following:-				
25.2.8	Addressable optical smoke detectors with inbuilt Isolator with remote indicator	216	No.		
25.2.9	Photoelectric Thermal Detectors with inbuilt isolator complete with mounting base	18	No.		
25.2.10	Manual Call Point complete with Single terminal surface back box for call points	88	No.		
25.2.11	Intelligent Wall Mount Sounder Strobe complete with mounting base	88	No.		
25.2.12	Addressable Beam Smoke Detector Complete with mounting box and security kit	4	No.		
25.2.13	Remote Test Station complete with mounting base	2	No.		
	power Supply Unit and Backup Power for FACP and Repeater	2	No.		
25.3.0	PUBLIC ADDRESS & EVACUATION				
25.3.1	SPEAKER CEILING WHITE with white, ceiling surface-mountable back box	114	No.		
25.3.2	Digital Integrated System Manager as the basic unit for Public Address and Voice Alarm System with built-in 1GB flash memory, conect with devixes and the network to extend zone connections ,loudspeaker output, Trigger input/output, Audio input,AVC Input	1	No.		
25.3.3	High EfficiencyPower Amplifier with 24VDC Backup Power Supply System	2	No.		
25.3.4	Configurable Network Paging Console with 4.3 inch color LCD touch screen, Detachablegoosneck microphone, Built-in monitor loudspeaker and Digital audio processing	1	No.		
	Total Carried to Summary Page No. BQ/12				

25.4.0	SUMMARY PAGE	
25.4.1	Total for Preliminaries B/F	
25.4.2	Total for Fire Alarm Detection and Evacuation B/F	
	Total for Security & Safety Installations Carried to Services Summary Page	

26. BILL 26 : LIFTS INSTALLATIONS

BILL 26 : LIFTS INSTALLATIONS					
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Ksh)	AMOUNT (Ksh)
26.1.0	<u>Preliminary & Conditions of Contracts</u>				
26.1.1	Allow for co-ordination of works with the Main Contractor and other Sub-contractors	1	Item		
26.1.2	Allow for preparation of all "shop" drawings and submitting to the Engineers for approval prior to commencement of work on site	1	Item		
	To ensure the equipment are provided to specifications allow, allow for factory visit for 7 No. of persons (Consultants and client representatives) to visit the manufacturing factory to verify the lift specifications and witness all the relevant factory tests before approval of shipping is given:				
	The cost of				
26.1.3	the visit to include: i) Visa processing fees ii) Return air-tickets to and from the factory iii) Any transfer fees iv) Local transport both in Nairobi and the city of destination v) Accommodation for the seven at a hotel/resort not less than 4 stars in rating vi) An allowance of not less than \$1,000 to each member of the team vii) Any other incidental cost for smooth facilitation of the trip.	1	Lot		
26.1.4	Allow for preparation of all "As Built" Drawings immediately after Practical Completion of the works.	1	Item		
26.1.5	Allow for the preparation of all "Operations & Maintenance Manuals" immediately after Practical Completion of the works.	1	Item		
26.1.6	Allow for on-site Training of the Operators	1	Item		
26.1.7	Allow for all the preliminaries relating to this contract as specified	1	Item		
	Allow for all the preliminaries relating to this contract as specified	1	Item		
Total Carried to Next Page					

ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT
					SHS.
	Total bf from previous page				
26.2.0	VIP Panoramic Lift with the following data: Supply, Install and commission a VIP Panoramic passenger lift manufactured to comply with EN81-20/50, EN81-70 with the following description:	1	No		
26.2.1	Capacity: 1600 Kg				
26.2.2	Speed: 2.00 m/s				
26.2.3	Control System: Full Collective				
26.2.4	Travel: 35.4m				
26.2.5	Counter Weight Safty Gear				
26.2.6	Shaft Size: 2600(w)x2900(d)				
26.2.7	Pit: 1500mm				
26.2.8	No. of floors: 10				
26.2.9	No. of Served floors: 10				
26.2.10	No of Landing Door: 10				
26.2.11	Car Entrance Type: Single				
26.2.12	Car Size: 1600(w)x2100(d)				
26.2.13	Door Type: 2 Panel Centre Opening				
26.2.14	Door Size: 1400(w)x2300(h)				
26.2.15	Car Finish: Champagne/Panoramic				
26.2.16	Car Door Finish: Champagne				
26.2.17	Landing Door Finish: Champagne				
26.2.18	Sill Material: Extruded Aluminium				
26.2.19	Signalization Display Type: LCD Display				
26.2.20	COP QTY: 2				
26.2.21	No. of Riser/Floor: 2				
26.2.22	Card Reader Provision				
26.2.23	CCTV Provision				
26.2.24	Intercom provision				
	Note The Lift should be Energy Efficient with Regenerative Drive, VVVF Variable voltage Variable frequency Motors, Efficient Lighting - LED indication and button Lighting, Sensor Controls- cabin lights and indicators are turned off when not in sleep mode. It should be padded Control options - Emergency light, fan in car, 2-way intercom, Telephone, Fire detection(Whole building doors open), fireman's drive, Elevator Announcer in English, lock with emergency drive, recessed overload signal & buzzer. Module for integration with BMS System				
	Total Carried to Next Page				

	-				AMOUNT
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	SHS.
26.3.0	Passager Lift with the following data: Supply, Install and commission a passenger lift manufactured to comply with EN81-20/50, EN81-70 with the following description:	2	No		
26.3.1	Capacity: 1600 Kg				
26.3.2	Speed: 2.0 m/s				
26.3.3	Control System: Full Collective				
26.3.4	Travel: 35.4m				
26.3.5	Counter Weight Safty Gear				
26.3.6	Shaft Size: 2600(w)x3000(d)				
26.3.7	Pit: 1500mm				
26.3.8	No. of floors: 10				
26.3.9	No. of Served floors: 10				
26.3.10	No of Landing Door: 10				
26.3.11	Car Entrance Type: Single				
26.3.12	Car Size: 1600(w)x2100(d)				
26.3.13	Door Type: 2 Panel Centre Opening				
26.3.14	Door Size: 1400(w)x2300(h)				
26.3.15	Car Finish: Brushed Stainless Steel				
26.3.16	Car Door Finish: Brushed Stainless Steel				
26.3.17	Landing Door Finish: Brushed Stainless Steel				
26.3.18	Sill Material: Extruded Aluminium				
26.3.19	Signalization Display Type: LCD Display				
26.3.20	COP QTY: 2				
26.3.21	No. of Riser/Floor: 2				
26.3.22	Card Reader Provision				
26.3.23	CCTV Provision				
	- Notes: The Lift should be Energy Efficient with Regenerative Drive, VVVF Variable voltage Variable frequency Motors, Efficient Lighting - LED indication and button Lighting, Sensor Controls- cabin lights and indicators are turned off when not in sleep mode. Control options - Emergency light, fan in car, 2-way intercom, Telephone, Fire detection(Whole building doors open), fireman's drive, Elevator Announcer in English, lock with emergency drive, recessed overload signal & buzzer.				
	Total Carried to Next Page				

ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT
					SHS.
	Total bf from previous page				
26.4.0	Module for integration with BMS System Floor front facial Cabin location Indicator/ Sensor units Floor landing directional indicator buttons Service/Goods Lift with the following data: Supply, Install and commission a service/goods lift manufactured to comply with EN81-20/50, EN81-70 with the following description: 26.4.1 Capacity: 1600 Kg 26.4.2 Speed: 1.5 m/s 26.4.3 Control System: Full Collective 26.4.4 Travel: 12m 26.4.5 Counter Weight Safty Gear 26.4.6 Shaft Size: 2600(w)x3000(d) 26.4.7 Pit: 1500mm 26.4.8 No. of floors: 4 26.4.9 No. of Served floors: 2 26.4.10 No of Landing Door: 2 26.4.11 Car Entrance Type: Single 26.4.12 Car Size: 1600(w)x2100(d) 26.4.13 Door Type: 2 Panel Centre Opening 26.4.14 Door Size: 1400(w)x2300(h) 26.4.15 Car Door Finish: Brushed Stainless Steel 26.4.16 Landing Door Finish: Brushed Stainless Steel 26.4.17 Sill Material: Extruded Aluminium 26.4.18 Signalization Display Type: LCD Display 26.4.19 COP QTY: 2 26.4.20 No. of Riser/Floor: 2 26.4.21 Card Reader Provision 26.4.22 CCTV Provision 26.4.23 Canvas for goods lift Notes:	1	No		
	Total Carried to Next Page				

ITEM	- DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT
					SHS.
	<p>Total bf from previous page</p> <p>The Lift should be Energy Efficient with Regenerative Drive, VVVF Variable voltage Variable frequency Motors, Efficient Lighting - LED indication and button Lighting, Sensor Controls- cabin lights and indicators are turned off when not in sleep mode.</p> <p>Control options - Emergency light, fan in car, 2-way intercom, Telephone, Fire detection(Whole building doors open), fireman's drive, Elevator Announcer in English, lock with emergency drive, recessed overload signal & buzzer.</p> <p>Module for integration with BMS System</p> <p>Floor front facial Cabin location Indicator/ Sensor units</p> <p>Floor landing directional indicator buttons</p>				
	Total Carried to Services Summary Page				

27. SECTION 27 : GENERATOR INSTALLATIONS

SECTION 27 : GENERATOR INSTALLATIONS			
ITEM	DESCRIPTION	UNIT	AMOUNT (Ksh)
27.1	Sub-Contract Preliminaries.	Item	
27.2	Supply and installation of set of 2No. 300 kVA generator sets complete with synchronizing panel.	Item	
27.3	Supply and installation of control panel and local cabling.	Item	
27.4	VAT and Customs Duty on imported items	Item	
27.5	Commissioning of set	Item	
27.6	Supply of "AS FITTED" drawings and maintenance.	Item	
27.7	Supply of tool kit as per Schedule No. 1.5 of the generator specifications	Item	
27.8	Supply of spares and lubricants as per Schedule No. 1.6 of the generator specifications	Item	
27.9	Fuel Storage tanks as per Schedule No. 1.7 of the generator specifications	Item	
27.10	Earthing of the generator as per Schedule No. 1.8 of the generator specifications	Item	
27.11	Any other item to complete installation (if nil, write nil) i) ii) iii) iv) v)	Item	
Total Carried to Services Summary Page			

28. BILL 28: PLUMBING & DRAINAGE

BILL 28: PLUMBING & DRAINAGE					
Item	Description	Qty.	Unit	Rate (Ksh)	Amount (Ksh)
28.1.0	<u>PRELIMINARIES & CONDITIONS OF CONTRACT</u>				
28.1.1	Allow for preparation of all "shop" drawings and submitting to the Engineers for approval prior to commencement of work on site	1	Item		
28.1.2	Arrangement for all inspections and tests of the installation that may be required by the Engineer/Client and shall provide all instruments and equipment required for these tests	1	Item		
28.1.3	Allow for preparation of all "As Built" Drawings immediately after Practical Completion of the works.	1	Item		
28.1.4	Allow for the preparation of all "Operations & Maintenance Manuals" immediately after Practical Completion of the works.	1	Item		
28.1.5	Allow for on-site Training of the Operators for specialised equipment	1	Item		
28.1.6	Allow for city council water connection & borehole meter connection	1	Item		
Total Carried to Mechanical Summary Page					-
28.2.0	Internal Foul Drainage				
	Supply and fix mineral-reinforced Polypropylene(PP), Soil and waste system as per DIN EN 12056 and DIN 1986-100 manufacturer's printed instructions and as described or equivalent and approved by the Engineer. Tenderers must allow in their pipework ; couplers, paddle flanges, pipe sleeves and also where stated for pipes clips or holder bats, plugged and screwed.				
	Note:				
	All Polypropylene(PP) branches, tees, reducing branches, reducing tees, reducers, etc. are to be formed in strict accordance with the manufacturer's instructions as required for the satisfactory functioning of the system.				
28.2.1	Pipe Works				
28.2.1.1	Polypropylene(PP) 32Ø	200	m		
28.2.1.2	Ditto 40Ø	670	m		
28.2.1.3	Ditto 50Ø	1370	m		
28.2.1.4	Ditto 63Ø	500	m		
28.2.1.5	Ditto 75Ø	825	m		
28.2.1.6	Ditto 110Ø	1450	m		
Total Carried Next to Page					
					AMOUNT
ITEM	DESCRIPTION	QTY.	UNIT	RATE	SHS.
Total bf from previous page					
28.2.1.7	Ditto 160Ø	900	m		
28.2.1.8	Ditto 200Ø	100	m		
28.2.2	45°Bends				
28.2.2.1	Polypropylene(PP) 40Ø	300	No.		
28.2.2.2	Ditto 50Ø	350	No.		

28.2.2.3	Ditto 75Ø	165	No.		
28.2.2.4	Ditto 110Ø	450	No.		
28.2.2.5	Ditto 160Ø	150	No.		
28.2.2.6	Ditto 200Ø	56	No.		
28.2.3	88.5° Bends				
28.2.3.1	Polypropylene(PP) 50Ø	250	No.		
28.2.3.2	Ditto 63Ø	100	No.		
28.2.3.3	Ditto 75Ø	150	No.		
28.2.3.4	Ditto 110Ø	300	No.		
28.2.3.5	Ditto 160Ø	176	No.		
28.2.4	45° Bends long				
28.2.4.1	Polypropylene(PP) 75Ø	100	No.		
28.2.4.2	Ditto 110Ø	120	No.		
28.2.5	90° Bends (Long Radius)				
28.2.5.1	Polypropylene(PP) 32Ø	45	No.		
28.2.5.2	Ditto 40Ø	78	No.		
28.2.5.3	Ditto 50Ø	100	No.		
28.2.5.4	Ditto 75Ø	100	No.		
28.2.5.5	Ditto 110Ø	150	No.		
28.2.5.6	Ditto 160Ø	120	No.		
28.2.6	45° Equal Tees				
28.2.6.1	Polypropylene(PP) 32Ø x 32Ø	100	No.		
28.2.6.2	Ditto 40Ø x 40Ø	345	No.		
	Total Carried Next to Page				
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.2.6.3	Ditto 50Ø x 50Ø	210	No.		
28.2.6.4	Ditto 63Ø x 63Ø	79	No.		
28.2.6.5	Ditto 75Ø x 75Ø	80	No.		
28.2.6.6	Ditto 110Ø x 110Ø	180	No.		
28.2.6.7	Ditto 160Ø x 160Ø	100	No.		
28.2.6.8	Ditto 200Ø x 200Ø	35	No.		
28.2.7	45° Unequal Tees				
28.2.7.1	Polypropylene(PP) 40Ø x 32Ø	120	No.		
28.2.7.2	Ditto 50Ø x 40Ø	167	No.		
28.2.7.3	Ditto 63Ø x 50Ø	80	No.		
28.2.7.4	Ditto 75Ø x 40Ø	67	No.		
28.2.7.5	Ditto 75Ø x 50Ø	50	No.		
28.2.7.6	Ditto 75Ø x 63Ø	45	No.		
28.2.7.7	Ditto 110Ø x 40Ø	67	No.		
28.2.7.8	Ditto 110Ø x 50Ø	87	No.		
28.2.7.9	Ditto 110Ø x 75Ø	56	No.		
28.2.7.10	Ditto 160Ø x 75Ø	111	No.		
28.2.7.11	Ditto 160Ø x 110Ø	130	No.		
28.2.8	88.5° Equal Tees				
28.2.8.1	Polypropylene(PP) 32Ø x 32Ø	54	No.		
28.2.8.2	Ditto 40Ø x 40Ø	120	No.		
28.2.8.3	Ditto 50Ø x 50Ø	100	No.		
28.2.8.4	Ditto 63Ø x 63Ø	57	No.		
28.2.8.5	Ditto 75Ø x 75Ø	78	No.		

28.2.8.6	Ditto 110Ø x 110Ø	123	No.		
28.2.8.7	Ditto 160Ø x 160Ø	83	No.		
28.2.8.8	Ditto 200Ø x 200Ø	20	No.		
28.2.9	88.5° Unequal Tees				
	Total Carried Next to Page				
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.2.9.1	Polypropylene(PP) 40Ø x 32Ø	34	No.		
28.2.9.2	Ditto 50Ø x 40Ø	124	No.		
28.2.9.3	Ditto 63Ø x 40Ø	76	No.		
28.2.9.4	Ditto 63Ø x 50Ø	78	No.		
28.2.9.5	Ditto 75Ø x 40Ø	59	No.		
28.2.9.6	Ditto 75Ø x 50Ø	88	No.		
28.2.9.7	Ditto 110Ø x 40Ø	34	No.		
28.2.9.8	Ditto 110Ø x 50Ø	76	No.		
28.2.9.9	Ditto 110Ø x 75Ø	67	No.		
28.2.9.10	Ditto 160Ø x 110Ø	100	No.		
28.2.10	Reducers				
28.2.10.1	Polypropylene(PP) 50Ø x 40Ø	120	No.		
28.2.10.2	Ditto 63Ø x 40Ø	57	No.		
28.2.10.3	Ditto 63Ø x 50Ø	76	No.		
28.2.10.4	Ditto 75Ø x 40Ø	89	No.		
28.2.10.5	Ditto 75Ø x 50Ø	106	No.		
28.2.10.6	Ditto 75Ø x 63Ø	56	No.		
28.2.10.7	Ditto 110Ø x 40Ø	56	No.		
28.2.10.8	Ditto 110Ø x 50Ø	89	No.		
28.2.10.9	Ditto 110Ø x 63Ø	80	No.		
28.2.10.10	Ditto 110Ø x 75Ø	89	No.		
28.2.10.11	Ditto 160Ø x 75Ø	82	No.		
28.2.10.12	Ditto 160Ø x 110Ø	82	No.		
28.2.11	Air Admittance Valve				
28.2.11.1	50Ø	56	No.		
28.2.11.2	100Ø	45	No.		
28.2.12	Floor Traps				
	Polypropylene(PP) floor trap with adjustable height inlet funnel made of PP, stainless steel grating, quality monitored in accordance with EN 1253				
	Total Carried Next to Page				
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.2.12.1	Polypropylene(PP) 63Ø	100	No.		
	Manholes 600 by 450mm				
28.2.13	Concrete works including benching	35	No.		
	Double sealed access cover 600 by 450mm				
28.2.14	Gulley Trap	36	No.		
28.2.15	Vent Cowl	20	No.		
28.2.16	Access caps				
28.2.16.1	Polypropylene(PP)50Ø	100	No.		

28.2.16.2	Polypropylene(PP) 75Ø	45	No.		
28.2.16.3	Polypropylene(PP) 100Ø	50	No.		
28.2.16.4	Polypropylene(PP) 160Ø	50	No.		
28.2.16.5	Polypropylene(PP) 200Ø	10	No.		
28.2.17	Bib tap 25mm	15	No.		
28.2.18	Testing & commissioning	1	lot		
	Total Carried to Mechanical Summary Page				
28.3.0	<u>ROOF DRAINAGE SYSTEM</u>				
28.3.1	Roof Outlets				
	Supply, Install & Commission fulbora gravity Roof/Balcony rainwater outlets manufactured in accordance with EN 1253-2 as ACO model or approved equivalent. The outlet should come with related fittings including grating/screen.				
28.3.1.1	100mm Ø	78	No.		
28.3.2	Rainwater Drain Pipes				
	Supply, Install and commission rainwater downpipes manufactured in accordance to EN 1452 including all range piping, fittings, hangers and support brackets.				
	Polypropylene (PP)				
28.3.2.1	Ditto 75Ø	140	m		
28.3.2.2	Ditto 100Ø	650	m		
	Upvc				
28.3.2.3	100Ø	300	m		
	Total Carried to Mechanical Summary Page				
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
28.4.0	<u>Internal Cold & Hot Water Supply System</u>				
	Supply and fix the following in PP-R water pipes to EN ISO 15874-2, DIN 8077/8, with fittings fixed to manufacturer's printed instructions. Tenderers must allow in their pipework; paddle flanges, pipe sleeves and also where stated for pipes clips or holder bats, plugged and screwed. As Astral or equal and approved				
	Note				
	All PP-R branches, tees, reducing branches, reducing tees, reducers, adapters etc. are to be formed in strict accordance with the manufacturer's instructions as required for the satisfactory functioning of the system.				
28.4.1	Pipe Works				
28.4.1.1	PP-R 20Ø	602	m		
28.4.1.2	Ditto 25Ø	322	m		
28.4.1.3	Ditto 32Ø	225	m		
28.4.1.4	Ditto 40Ø	32	m		
28.4.1.5	Ditto 50Ø	285	m		
28.4.1.6	Ditto 63Ø	463	m		
28.4.1.7	Ditto 80Ø	12	m		
28.4.2	Coupler				
28.4.2.1	PP-R 20Ø	60	No.		
28.4.2.2	Ditto 25Ø	62	No.		
28.4.2.3	Ditto 32Ø	640	No.		
28.4.2.4	Ditto 40Ø	101	No.		
28.4.2.5	Ditto 50Ø	97	No.		

28.4.2.6	Ditto 63Ø	85	No.		
28.4.3	Elbow 45°/ 90°				
28.4.3.1	PP-R 20Ø	1002	No.		
28.4.3.2	Ditto 25Ø	753	No.		
28.4.3.3	Ditto 32Ø	456	No.		
28.4.3.4	Ditto 63Ø	38	No.		
28.4.4	Equal Tee				
28.4.4.1	PP-R 25Ø	285	No.		
	Total Carried Next to Page				
					AMOUNT
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	SHS.
	Total bf from previous page				
28.4.4.2	Ditto 32Ø	302	No.		
28.4.4.3	Ditto 63Ø	62	No.		
28.4.4.4	Ditto 80Ø	10	No.		
28.4.4.5	Ditto 100Ø	19	No.		
28.4.5	Reducers				
28.4.5.1	PP-R 25Ø x 20Ø	302	No.		
28.4.5.2	Ditto 40Ø x 32Ø	98	No.		
28.4.5.3	Ditto 50Ø x 40Ø	62	No.		
28.4.5.4	Ditto 63Ø x 50Ø	48	No.		
28.4.5.5	Ditto 80Ø x 63Ø	62	No.		
28.4.5.6	Ditto 100Ø x 80Ø	12	No.		
28.4.6	Reducing Tees				
28.4.6.1	PPR 25Ø x 20Ø x 25Ø	86	No.		
28.4.6.2	Ditto 32Ø x 25Ø x 32Ø	123	No.		
28.4.6.3	Ditto 40Ø x 32Ø x 40Ø	26	No.		
28.4.6.4	Ditto 50Ø x 40Ø x 50Ø	20	No.		
28.4.6.5	Ditto 63Ø x 50Ø x 63Ø	10	No.		
28.4.7	Pipe Plug (Plastic)				
28.4.7.1	Ditto 40Ø	170	No.		
28.4.8	Adapter Union (Plastic)				
28.4.8.1	PP-R 40Ø	18	No.		
28.4.8.2	PP-R 50Ø	38	No.		
28.4.8.3	PP-R 63Ø	22	No.		
28.4.9	Female Elbow Adapter				
28.4.9.1	20Ø x ½"	100	No.		
28.4.9.2	32Ø x 1"	20	No.		
28.4.10	Shut off Angle Valve				
28.4.10.1	Supply & Install 1/2"x1/2" angle valve as PEX-233-CP model or approved equivalent.	170	No.		
	Total Carried Next to Page				
					AMOUNT
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	SHS.
	Total bf from previous page				
28.4.11	Isolation Valves				
	Supply and Install brass Isolation valves as PEGLER model or approved equivalent.				
28.4.11.1	Isolation valves 32Ø	8	No.		
28.4.11.2	Isolation valves 40Ø	40	No.		

28.4.11.3	Isolation valves 63Ø	10	No.		
28.4.11.4	Isolation valves 100Ø	6	No.		
	Check Valve				
28.4.11.5	63Ø	2	No.		
28.4.12	Flexing Tubes				
28.4.12.1	1/2" diameter x 300mm long flexible connectors for connecting the sanitary fittings To be as YORKE-VBC450S or approved equivalent	170	No.		
28.4.13	Water Meter				
28.4.13.1	Supply, Install and Commission Water Meter with the corresponding sizes to the engineer's approval.	2	No.		
	Total Carried to Mechanical Summary Page				
28.5.0	<u>SANITARY FITTINGS</u>				
	Supply and fix the following including all materials and jointing to supply, waste and overflow pipes				
28.5.1	Wash Basin				
28.5.1.1	Wash Basin 470mm by 470mm by 170mm counter top as CERA CASKET model no. S2020108 or approved equivalent	89	No.		
28.5.1.2	CERA Single Lever Faucets - F1014106 Gayle Pillar cock swan neck spout or approved equivalent	89	No.		
28.5.1.3	Wall Hung wash basin as TOTO No.LW1514B	13	No.		
28.5.1.4	1 1/4" White Plastic bottle Trap as Viega	108	No.		
28.5.2	Water Closet (WC) - Retail Areas				
28.5.2.1	Playa back to wall WC pan white G-4683 capable of 3/6L Flush. The WC to be supplied with related accessories like toilet seat covers and connectors	107	No.		
28.5.2.2	WC concealed cistern with control plate chrome plated as OLI model no 638504 or approved equivalent	107	No.		
	Total Carried Next to Page				
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.5.3	Urinal				
28.5.3.1	Urinal bowl back inlet white as LECICO Atlas Geo or approved equivalent	30	No.		
28.5.3.2	Manual urinal flush Valve as COTTO Chrome Urinal Flush Valve complete with Tail Pipe - 40 mm or approved equivalent	30	No.		
28.5.4	Physically Challenged Toilets				
28.5.4.1	Physically challenges set as Armitage Shanks Doc M Contour 21+ close coupled right hand corner pack, WC pan, Wash basin, water saving delay fill cistern with spatula lever, grab rails, hinged support rail with toilet roll holder, seat no cover with retaining buffers, copper tails on TMV3 mixer tap or equal & approved	12	No.		
28.5.5	Shower Components				
28.5.5.1	Yorke -Ysl 100 Prestige shower mixer 3 way as YORKE	16	No.		
28.5.5.2	Instant shower heater and arm as Lorenzetti	16	No.		
28.5.6	Cleaner's Sink				
28.5.6.1	As Lecico suzy sink white Cleaner's Sink or approved equivalent. The sink to be supplied complete with bib tap	7	No.		
28.5.6.2	Stainless Steel Tissue Dispenser as Jumbo 275mm	107	No.		

28.5.6.3	Medichief Plastic Wall mounted manual soap dispenser- 1 litre model no. MDM1000B or approved equivalent	27	No.		
28.5.6.4	Hand Dryer as TOTO model no.TYC322W or approved equivalent	27	No.		
28.5.5	Kitchen Sink				
28.5.5.1	Double bowl double drain stainless steel kitchen sink as Franke GMN 611-100 SBS D INSET 50 X 120 or equal and approved	4	No.		
	Total Carried to Mechanical Summary Page				
28.6.0	<u>PRESSED STEEL WATER TANKS</u>				
	Pressed steel water storage tanks consisting of mass produced pressed steel panels bolted together in 1220mm square modules, hydraulically cold pressed in one piece and embossed with a distinctive star pressing at the centre to strengthen the panels.				
	Total Carried Next to Page				
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE	AMOUNT SHS.
	Total bf from previous page				
28.6.1	Ground Storage Tank of 12000 x 7000 x 4000 mm (H) to BS 4360 Grade 43A, as made by Steel Structures. The tank to be complete with the following:- a. Flanged 100mmØ inlet pipe connection; b. 100mmØ flanged outlet pipe connectors; c. 100mmØ tank drain pipe connection; d.100mm Ø flanged overflow pipe connection; e. Manhole and cover with mosquito proof mesh.	1	No.		
28.6.2	Roof Storage Tank of 5000 x 6000 x 2000 mm (H) to BS 4360 Grade 43A, as made by Steel Structures. The tank to be complete with the following:- a. Flanged 100mmØ inlet pipe connection; b. 100mmØ flanged outlet pipe connectors; c. 100mmØ tank drain pipe connection; d.100mm Ø flanged overflow pipe connection; e. Manhole and cover with mosquito proof mesh.	1	No.		
	Total Carried to Mechanical Summary Page				
28.6.0	<u>WATER TRANSFER, BOOSTER PUMPS & DRAINAGE PUMPS</u>				
28.6.1	Supply, install and Commission Transfer Pump Set from Domestic Water tank to Roof Tank				
28.6.1.1	Flow: 15.00 m³/h, Head: 6 bar Rated power P2/Current: 5.5 kW/10.50 A Mains connection 3~ 400 V / 50 Hz Automation: BMS Ready (1 Duty + 1 Standby)	1	Set		
28.6.2	Submersible Drainage Pump				
28.6.2.1	Hydraulic data (Duty point) Flow: 15.00 m³/h, Head: 4m Rated power P2/Current: 0.75 kW/4.4A Mains connection 1~ 230 V / 50 Hz Automation: BMS Ready (1 Duty + 1 Standby)	4	Set		
28.6.3.2	Control MS-L-2x4KW-DOL	4	Set		
28.6.3.3	Float switch WA65 with 10m cable	12	Set		

	Total Carried to Mechanical Summary Page				
ITEM	DESCRIPTION	QTY.	UNIT	RATE (KSH)	AMOUNT (KSH)
28.7.0	<u>FIREFIGHTING INSTALLATIONS</u>				
28.7.1	Fire- Fighting Pumps				
	Supply, install and comission fully automatic fire pumpset including duty & standby electrically driven pumpset, control panel, interconnecting manifold pipework to Automatic Sprinklers, hosereels and connection to detection/alarm system, these to be complete with pressure reducing valve, fittings all mounted on a fabricated steel baseplate to valves, pressure vessel and fittings all mounted on a fabricated steel baseplate to BS5306. Pump shall be as follows:				
28.7.1.1	Main Pumpset (Electric & Jockey Pumps)				
	Fire fighting purposes in accordance with EN 12845 Flow: 750.00 US gpm Total Head: 10 bar Automation: BMS Ready	1	Set		
28.7.1.2	Backup Pump (Diesel Pump)				
	Fire fighting purposes in accordance with EN 12845 Model: SiFire EN 80/315-311-145 D Flow: 750.00 US gpm Total Head: 10 bar Automation: BMS Ready	1	Set		
28.7.1.3	Valves & Accessories				
	Isolation Valves on pump suction				
28.7.1.3.1	Sluice valves				
	Supply and install 150mm Sluice valves, non rising spindle, with associated bolts, nuts, washer and gaskets, tested to 10 kg/cm ² pressure complete as per specifications for jockey pump suction and main pump suction	4	No		
28.7.1.3.2	Y-strainers				
	Supply and install 150mm Dia Y-strainers, with associated bolts, nuts, washer and gaskets, tested to 10 kg/cm ² pressure complete as per specifications for jockey and main pump suction	2	No		
28.7.1.3.3	Non return valves				
	Supply and install 150mm Dia. Non return valves, CI construction, with associated bolts,nuts, washer and gaskets, tested to 10 kg/cm ² pressure complete as per specifications for jockey and main pump discharge	2	No		
	Total Carried Next to Page				
					AMOUNT
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	SHS.
	Total bf from previous page				
28.7.1.3.4	Isolation Valves on pump discharge /test drain				
	Supply and Install 150mm Dia. Butterfly valves, Wafer type, PN 16 rating, CI Body, Nitrile rubber sheet, CI disc, carbon steel shaft, hand operated upto 150 NB, gear	3	No		

	operated for 200 NB & above, with associated bolts, nuts, washer and gaskets, tested to 10kg/cm ² pressure complete as per specifications for test drain, jockey and main pump discharge				
28.7.1.3.5	Pressure Regulating Valve				
	Supply and Install DN150 flanged type PRV rated for pressure of 7 Bars. The valve shall be UL listed/FM approved	1	No		
28.7.1.3.6	Outside Screw and Yoke Valve				
	Supply and Install DN150 OS&Y Valve. The valve shall be fully encapsulated EPDM ductile iron Wedge to ensure bubble-tight sealing and UL listed/FM approved	4	No		
28.7.1.4	Pump House Electricals & Instrumentation				
28.7.1.4.1	Cabling				
	Electrical cabling work with XLPE insulated Copper conductor armoured cable routed through standard cable trays from the electrical panel to respective pump, cabling for pressure switches etc..	1	Lot		
28.7.1.4.2	Local Push Button Stations				
	Supply and Install test and commission LPBS in M.S. enclosure with start-stop push buttons and NO, NC elements. Stop button required with mushroom head and stay-put type arrangement. Mounted suitably on a fabricated stand near each motor.	1	Lot		
28.7.1.4.3	Annunciator Panel				
	SITC of Alarm Annunciator Panel - 24 windows, with push buttons for test, acknowledge, reset and complete with hooter and other accessories.	1	Lot		
28.7.1.5	Testing & Commissioning				
	Allow for Testing and Commissioning of the whole Pumping System as described in the Technical Specifications	1	Lot		
28.7.2	Wet Riser & Hose Sytem				
28.7.2.1	Breaching Inlet /Booster inlets				
	Supply and Install Fire service 6" x 4 way breaching inlet connection complete with Drain Valves complying with BS 336:2010, PN16 Rated and non-return valves. The breaching inlets to be manufactured to comply to BS 5041	2	No.		
28.7.2.2	Breeching Inlet Cabinet				
	Supply and install breaching inlet cabinet, recessed type to accommodate 6" x 4 way breaching inlet manufactured to comply to BS5041-5	2	No.		
	Total Carried Next to Page				
					AMOUNT
ITEM	<u>DESCRIPTION</u>	QTY.	UNIT	RATE (Kes)	SHS.
	Total bf from previous page				
28.7.2.3	Standpipe Risers & Drain Pipes				
	Pipework complete with necessary fittings, brackets, bends, elbows, hangers, supports, wall chasing, paintings, trenches, excavation, back-filling, sleeves etc. The quoted rate shall includes of Acrylic Fire stop Sealant (as per IS 12458:1988) in the opening for pipes passing through fire compartment walls of RCC floors, masonry walls to provide up to 2 hours fire rating.				
28.7.2.3.1	150Ø Dis GI Class Sch. 40	250	m		
28.7.2.3.2	100Ø Dis GI Class Sch. 40	60	m		

28.7.2.3.3	75Ø Dis GI Class Sch. 40	80	m		
28.7.2.3.4	50Ø Dis GI Class Sch. 40	230	m		
28.7.2.4	Automatic Air Release Valve				
	Supply and install DN25 Pressure Relief Valve rated for maximum pressures. The valve shall be UL listed/FM approved	4	No.		
28.7.2.5	Cabinets for Hose Reel, Fire Equipment & Landing Valve				
	Supply and install double recessed vertical type cabinet to accommodate Fire hosereel, landing valve & fire extinguishers manufactured to comply with BSEN 671-1. The cabinet to be made of electro galvanised sheet and LPCB certified	22	No.		
28.7.2.6	Fire Hose Reel with Semi-rigid Hose				
	Supply and Install automatic, cabinet mounted type hosereel with 30 meters long, 25Øhose manufactured to BS EN 671-1:2001 and nozzle having SHUT, JET and SPRAY settings. The hosereel should be manufactured to BS EN 694-2001 3169/2 1981 and be able to withstand maximum pressure of up to 15 bars and LPCB certified.	22	No.		
28.7.2.7	Single Jacket Hose				
	Supply and install single 30 meters jacket hose manufactured according to BS 6391. The Hose to be 100% polyester plain-woven high tensile synthetic rubber lining. The hose to include pin lug coupling & Nozzle manufactured to comply to BS 336:2010. Coupling to be LPCB Certified while the hose shall UL listed	22	No		
28.7.2.8	Landing Valve				
	Supply and install DN2½" single outlet male threaded landing valve, oblique type. The body to made of copper alloy to BS EN 12163:1998 and be LPCB Certified, PRV to be included	20	No		
	Total Carried Next to Page				
				RATE	AMOUNT
ITEM	DESCRIPTION	QTY.	UNIT	(Kes)	SHS.
	Total bf from previous page				
28.7.2.9	Testing and Commissioning				
	Allow for testing and commissioning of the whole of wet riser and fire hosesystem to the satisfaction of the Engineer.	1	Lot		
28.7.3	Portable Fire Extinguishers				
	Supply, fix, test and commission of the following :-				
28.7.3.1	5.0 Kg CO ₂ gas fire extinguisher to BS 5423 including the appropriate initial charge and mounting brackets. To LPCB Certified	33	No		
28.7.3.2	6.0 kg Dry Power fire extinguisher to B.S 3465 and 5423, including the appropriate initial charge and mounting brackets. To LPCB Certified	33	No		
28.7.3.3	6 Litre. Portable water type fire extinguisher to B.S. 5423 including the appropriate initial charge and mounting brackets. To LPCB Certified	18	No		
28.7.3.4	9 Litre. Portable foam type fire extinguisher to B.S. 5423 including the appropriate initial charge and mounting brackets. To LPCB Certified	4	No		

28.7.3.5	6 Litre. Portable wet chemical type fire extinguisher to B.S. 5423 including the appropriate initial charge and mounting brackets. To LPCB Certified	4	No		
28.7.3.6	4.1 KG. Portable Clean Agent (HFC-236fa) type fire extinguisher to B.S. 5423 including the appropriate initial charge and mounting brackets. To LPCB Certified	2	No		
28.7.3.7	12kg Automatic dry powder fire extinguisher gas cartridge type in metal casing and fixed to ceiling/roof slab unit as Eversafe' or equal and approved with contents gauge sprinkler head and discharge nozzle	5	No		
28.7.4	Sprinkler Installations				
28.7.4.1	Zone System Control Valve Set				
	Supply and install combined Sprinkler DN100 Automatic Zone control valves complying with LPC Rules to include; Indicating Control Valve; Check Valves; Pressure Gauges; Flow Switches; Test Drain Valves for verification of Sprinkler Flow Demand; Alarm Valve, Pressure Relief Valves, Drain Valves etc.	16	Sets		
28.7.4.2	Sprinkler Heads				
	Sprinkler heads complete with dropper pipe work, guards and all necessary accessories:				
28.7.4.2.1	Exposed sprinkler -68°C K.80(metric)				
	Brass or chrome finish upright or pendent sprinkler as viking or equal and approved	969	No.		
	Total Carried Next to Page				
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.7.4.3	Sprinkler System Pipe Works				
	Galvanised Mild Steel Class 'C' tubing to B.S. 1387 with screwed and socketed joints to BS 21 including all range piping, fittings, sleeves, puddle flanges, hangers, supports, brackets, and supports				
28.7.4.3.1	25Ø GMS tubing	2682	m		
28.7.4.3.2	Ditto 32Ø	390	m		
28.7.4.3.3	Ditto 40Ø	600	m		
28.7.4.3.4	Ditto 50Ø	210	m		
28.7.4.3.5	Ditto 65Ø	270	m		
28.7.4.3.6	Ditto 80Ø	143	m		
28.7.4.3.7	Ditto 100Ø	60	m		
28.7.4.3.8	Ditto 150Ø	140	m		
28.7.4.4	Coupler				
28.7.4.4.1	GMS 25Ø	250	No.		
28.7.4.4.2	Ditto 32Ø	100	No.		
28.7.4.4.3	Ditto 40Ø	180	No.		
28.7.4.4.4	Ditto 50Ø	80	No.		
28.7.4.4.5	Ditto 63Ø	70	No.		
28.7.4.4.6	Ditto 75Ø	50	No.		
28.7.4.4.7	Ditto 110Ø	50	No.		
28.7.4.5	Elbow 45°/ 90°				
28.7.4.5.1	GMS 25Ø	220	No.		
28.7.4.5.2	Ditto 32Ø	100	No.		
28.7.4.5.3	Ditto 40Ø	60	No.		
28.7.4.5.4	Ditto 50Ø	50	No.		

28.7.4.5.5	Ditto 63Ø	33	No.		
28.7.4.5.6	Ditto 75Ø	28	No.		
28.7.4.5.7	Ditto 110Ø	9	No.		
28.7.4.5.8	Ditto 150Ø	12	No.		
	Total Carried Next to Page				
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.7.4.6	Equal Tee				
28.7.4.6.1	GMS 25Ø	230	No.		
28.7.4.6.2	Ditto 32Ø	120	No.		
28.7.4.6.3	Ditto 40Ø	250	No.		
28.7.4.6.4	Ditto 50Ø	180	No.		
28.7.4.6.5	Ditto 63Ø	90	No.		
28.7.4.6.6	Ditto 75Ø	10	No.		
28.7.4.6.7	Ditto 110Ø	10	No.		
28.7.4.6.8	Ditto 150Ø	15	No.		
28.7.4.7	Cross Piece				
28.7.4.7.1	GMS 25Ø	30	No.		
28.7.4.7.2	Ditto 32Ø	25	No.		
28.7.4.7.3	Ditto 40Ø	20	No.		
28.7.4.7.4	Ditto 50Ø	18	No.		
28.7.4.7.5	Ditto 63Ø	20	No.		
28.7.4.8	Reducers				
28.7.4.8.1	GMS 32Ø x 25Ø	230	No.		
28.7.4.8.2	Ditto 40Ø x 25Ø	50	No.		
28.7.4.8.3	Ditto 40Ø x 32Ø	150	No.		
28.7.4.8.4	Ditto 50Ø x 25Ø	20	No.		
28.7.4.8.5	Ditto 50Ø x 32Ø	30	No.		
28.7.4.8.6	Ditto 50Ø x 40Ø	100	No.		
28.7.4.8.7	Ditto 63Ø x 40Ø	82	No.		
28.7.4.8.8	Ditto 63Ø x 50Ø	80	No.		
28.7.4.8.9	Ditto 75Ø x 40Ø	50	No.		
28.7.4.8.10	Ditto 75Ø x 50Ø	70	No.		
28.7.4.8.11	Ditto 110Ø x 40Ø	10	No.		
28.7.4.8.12	Ditto 110Ø x 50Ø	12	No.		
28.7.4.8.13	Ditto 110Ø x 63Ø	10	No.		
	Total Carried Next to Page				
ITEM	DESCRIPTION	QTY.	UNIT	RATE (Kes)	AMOUNT SHS.
	Total bf from previous page				
28.7.4.8.14	Ditto 110Ø x 75Ø	20	No.		
28.7.4.8.15	Ditto 160Ø x 75Ø	20	No.		
28.7.4.8.16	Ditto 160Ø x 110Ø	10	No.		
28.7.4.9	Reducing Tees				
28.7.4.9.1	GMS 32Ø x 25Ø x 32Ø	100	No.		
28.7.4.9.2	Ditto 40Ø x 25Ø x 40Ø	80	No.		
28.7.4.9.3	Ditto 40Ø x 32Ø x 40Ø	98	No.		
28.7.4.9.4	Ditto 50Ø x 25Ø x 50Ø	50	No.		
28.7.4.9.5	Ditto 50Ø x 32Ø x 50Ø	40	No.		
28.7.4.9.6	Ditto 50Ø x 40Ø x 50Ø	60	No.		
28.7.4.9.7	Ditto 63Ø x 40Ø x 63Ø	60	No.		

28.7.4.9.8	Ditto 63Ø x 50Ø x 63Ø	40	No.		
28.7.4.9.9	Ditto 75Ø x 40Ø x 75Ø	40	No.		
28.7.4.9.10	Ditto 75Ø x 50Ø x 75Ø	30	No.		
28.7.4.9.11	Ditto 110Ø x 40Ø x 110Ø	20	No.		
28.7.4.9.12	Ditto 110Ø x 50Ø x 110Ø	20	No.		
28.7.4.9.13	Ditto 110Ø x 63Ø x 110Ø	10	No.		
28.7.4.9.14	Ditto 110Ø x 75Ø x 110Ø	10	No.		
28.7.4.9.15	Ditto 160Ø x 75Ø x 160Ø	10	No.		
28.7.4.9.16	Ditto 160Ø x 110Ø x 160Ø	10	No.		
28.7.4.10	Pipe Plug				
28.7.4.10.1	GMS ½"	6	No.		
28.7.4.10.2	Ditto 3"	8	No.		
28.7.4.10.3	Ditto 4"	10	No.		
28.7.4.10.4	Ditto 6"	10	No.		
28.7.4.11	Female Adapter				
28.7.4.11.1	25Ø x ½"	500	No.		
28.7.4.11.2	32Ø x ½"	150	No.		
	Total Carried Next to Page				
				RATE	AMOUNT
ITEM	DESCRIPTION	QTY.	UNIT	(Kes)	SHS.
	Total bf from previous page				
28.7.4.12	Female Tee Adapter				
28.7.4.12.1	25Ø x ½"	200	No.		
28.7.4.12.2	32Ø x ½"	80	No.		
28.7.4.12.3	40Ø x ½"	80	No.		
28.7.4.12.4	50Ø x ½"	40	No.		
28.7.4.12.5	63Ø x ½"	40	No.		
28.7.4.13	Female Elbow Adapter				
28.7.4.13.1	25Ø x ½"	400	No.		
28.7.4.14	Female Threaded Union				
28.7.4.14.1	25Ø x ½"	250	No.		
28.7.5	Allow for all pipes hangers (UL-listed) Connectors, Clamps etc. and any other item required for satisfactory operation of hydrant and fire sprinkler systems	1	Lot		
28.7.6	Alarm Check Valves				
28.7.6.1	150mm Alarm check valves	2	No.		
28.7.7	Painting				
	Priming and finish painting of the installation pipework with a primer coat and 2 No. coats of postal enamel red complete as required.	1	Lot		
28.7.8	Testing and Commissioning				
	Allow for setting to work, testing and commissioning of the whole of sprinkler system to the satisfaction of the Engineer.	1	Lot		
	Total Carried to Main Summary				
ITEM	DESCRIPTION				AMOUNT (KSH)
28.8	MECHANICAL SUMMARY PAGE				
28.8.1	Total for Preliminary & Conditions of Contract				
28.8.2	Total for Internal Soil & Waste Drainage				

28.8.3	Total for Roof Drainage System	
28.8.4	Total for Water Supply Systems	
	Total Carried to Main Summary	
ITEM	DESCRIPTION	AMOUNT (KSH)
	Total bf from previous page	
28.8.5	Total for Sanitary Fittings	
28.8.6	Total for Pressed Steel Water Tanks	
28.8.7	Total for Water Transfer, Booster & Drainage Pumps	
28.8.8	Total for Firefighting Installations	
	Total Carried to Services Summary Page	

29. BILL 29 : HVAC

ITEM	DESCRIPTION	UNIT	QTY.	RATE (KES)	AMOUNT (KES)
29.1	<u>Preliminary & Conditions of Contracts</u>				
29.1.1	Allow for Factory testing of equipments	Lot	1		
29.1.2	Allow for preparation of all "shop" drawings and submitting to the Engineers for approval prior to commencement of work on site	Lot	1		
29.1.3	Allow for preparation of all "As Built" Drawings immediately after Practical Completion of the works.	Lot	1		
29.1.4	Allow for the preparation of all "Operations & Maintenance Manuals" immediately after Practical Completion of the works and Staff training	Lot	1		
29.1.5	Arrangement for all inspections and tests of the installation that may be required by the Engineer/Client and shall provide all instruments and equipment required for these tests	Lot	1		
Total carried to summary page					
29.2	<u>Air Conditioning Systems</u>				
29.2.1	Auditorium Control Room (First Floor)				
	Split Unit				
	12000BTU/HR(3.5kW) hi-wall split units conditioner set inclusive of wireless remote and wall mounted outdoor unit complete with support brackets and anti vibration mountings. The unit shall operate on R32 refrigerant or any other non-ozone depleting refrigerant. The entire system shall be able to start automatically after power failure with 3 minutes delay. The unit shall be as Samsung model NS120DXEA for the indoor and RC120DHXEB for the outdoor unit or equivalent.	Set	1		
29.2.1.1					
29.2.1.2	Allow for liquid and gas insulated copper and indoor to outdoor power and communication cables	Lm	20		
29.2.1.3	Allow for power surge protector as Solatek AVS30 or equal and approved	No.	1		
29.2.1.4	Allow for floor-mounted condenser bracket to raise the unit 200mm above the floor to prevent waterlogging in case of surface flooding	No.	1		
Total carried to summary page					
29.2.1.5	Supply, deliver to site, install, test and commission PVC condensate drain pipes allowing for the labour required for chasing in walls and the necessary fittings required for a complete installation. 20mm diameter UPVC condensate drain pipework	Lm	25		
29.2.1.6	25mm diameter UPVC condensate drain pipework	Lm	15		

ITEM	DESCRIPTION	UNIT	QTY.	RATE (KES)	AMOUNT (KES)
29.2.1.7	32mm diameter UPVC condensate drain pipework	Lm	10		
29.2.2	Executive Lounge (Third Floor) Supply, install, test and commission the following in third floor: 19100BTU/HR (5.6kW) 4 way ceiling cassette split air conditioner set inclusive of wired remote and wall mounted outdoor unit complete with support brackets and anti vibration mountings. The unit shall operate on R32 refrigerant or any other non-ozone depleting refrigerant. The entire system shall be able to start automatically after power failure with 3 minutes delay. The condensing unit to come precharged with minimum mandatory factory charged refrigerant. The unit shall be as Samsung model NS1404DXEA for the indoor and RC140DHXEB for the outdoor unit or equivalent.				
29.2.2.1		Set	1		
29.2.2.2	Allow for liquid and gas insulated copper and indoor to outdoor power and communication cables	Lm	20		
29.2.2.3	Allow for power surge protector as Solatek AVS30 or equal and approved	No.	1		
29.2.2.4	Allow for floor-mounted condenser bracket to raise the unit 200mm above the floor to prevent waterlogging in case of surface flooding	No.	1		
29.2.25	Supply, deliver to site, install, test and commission PVC condensate drain pipes allowing for the labour required for chasing in walls and the necessary fittings required for a complete installation.				
	Total Carried to Next Page				
29.2.2.6	20mm diameter UPVC condensate drain pipework	Lm	32		
29.2.2.7	25mm diameter UPVC condensate drain pipework	Lm	21		
29.2.2.8	32mm diameter UPVC condensate drain pipework	Lm	16		
29.2.3	CEO Office (Third Floor) Split Unit 30100BTU/HR (9kW) 4 way ceiling cassette split air conditioner set inclusive of wired remote and wall mounted outdoor unit complete with support brackets and anti vibration mountings. The unit shall operate on R32 refrigerant or any other non-ozone depleting refrigerant. The entire system shall be able to start automatically after power failure with 3 minutes delay. The condensing unit to come precharged with minimum mandatory factory charged refrigerant. The unit shall be as Samsung model NS1404DXEA for the indoor and RC140DHXEB for the outdoor unit or equivalent.				
29.2.3.1		Set	1	255,000	255,000

ITEM	DESCRIPTION	UNIT	QTY.	RATE (KES)	AMOUNT (KES)
29.2.3.2	Allow for liquid and gas insulated copper and indoor to outdoor power and communication cables	Lm	20		
29.2.3.3	Allow for power surge protector as Solatek AVS30 or equal and approved	No.	1		
29.2.3.4	Allow for floor-mounted condenser bracket to raise the unit 200mm above the floor to prevent waterlogging in case of surface flooding	No.	1		
29.2.3.5	Supply, deliver to site, install, test and commission PVC condensate drain pipes allowing for the labour required for chasing in walls and the necessary fittings required for a complete installation.				
29.2.3.6	20mm diameter UPVC condensate drain pipework	Lm	27		
29.2.3.7	25mm diameter UPVC condensate drain pipework	Lm	24		
29.2.3.8	32mm diameter UPVC condensate drain pipework	Lm	19		
29.2.4	Executive Meeting Room (Third Floor) Split Unit 48000BTU/HR (14Kw) Medium Static Pressure (MSP) concealed duct split air conditioner set inclusive of wired remote and wall mounted outdoor unit complete with support brackets and anti vibration mountings. The unit shall operate on R32 refrigerant or any other non-ozone depleting refrigerant. The entire system shall be able to start automatically after power failure with 3 minutes delay. The condensing unit to come precharged with minimum mandatory factory charged refrigerant. The unit shall be as Samsung model AC140HCADKH/EU for the indoor and AC140HCADNH/EU for the outdoor unit or equivalent.				
29.2.4.1		Set	1		
29.2.4.2	Allow for liquid and gas insulated copper and indoor to outdoor power and communication cables	Lm	20		
29.2.4.3	Allow for power surge protector as Solatek AVS30 or equal and approved	No.	1		
29.2.4.4	Allow for 3 slot linear grilles for supply and return air as in the floor layouts	Lm	12		
29.2.4.5	Allow for 22 gauge GI sheets for fabrication and installation of the supply and return air as in the floor layouts. The price to include all reducers, bends, hangers and all accessories required to completion as per the layout accessories and consumables to finish the installation to the approval of the mechanical engineer	Sm	15		
29.2.4.6	Supply, deliver to site, install, test and commission PVC condensate drain pipes allowing for the labour required for chasing in walls and				

ITEM	DESCRIPTION	UNIT	QTY.	RATE (KES)	AMOUNT (KES)
29.2.4.7	the necessary fittings required for a complete installation. 20mm diameter UPVC condensate drain pipework	Lm	25		
29.2.4.8	25mm diameter UPVC condensate drain pipework	Lm	21		
29.2.4.9	32mm diameter UPVC condensate drain pipework	Lm	15		
29.2.5	Executive Boardroom (Fourth Floor) 48000BTU/HR (14Kw) Medium Static Pressure (MSP) concealed duct split air conditioner set inclusive of wired remote and wall mounted outdoor unit complete with support brackets and anti vibration mountings. The unit shall operate on R32 refrigerant or any other non-ozone depleting refrigerant. The entire system shall be able to start automatically after power failure with 3 minutes delay. The condensing unit to come precharged with minimum mandatory factory charged refrigerant. The unit shall be as Samsung model AC140HCADKH/EU for the indoor and AC140HCADNH/EU for the outdoor unit or equivalent.	Set	1		
29.2.5.1					
29.2.5.2	Allow for liquid and gas insulated copper and indoor to outdoor power and communication cables	Lm	20		
29.2.5.3	Allow for power surge protector as Solatek AVS30 or equal and approved	No.	1		
29.2.5.4	Allow for floor-mounted condenser bracket to raise the unit 200mm above the floor to prevent waterlogging in case of surface flooding	No.	1		
29.2.5.5	Allow for 3 slot linear grilles for supply and return air as in the floor layouts	Lm	12		
29.2.5.6	Allow for 22 gauge GI sheets for fabrication and installation of the supply and return air as in the floor layouts. The price to include all reducers, bends, hangers and all accessories required to completion as per the layout accessories and consumables to finish the installation to the approval of the mechanical engineer Supply, deliver to site, install, test and commission PVC condensate drain pipes allowing for the labour required for chasing in walls and the necessary fittings required for a complete installation.	Sm	15		
29.2.5.7	20mm diameter UPVC condensate drain pipework	Lm	24		
29.2.5.8	25mm diameter UPVC condensate drain pipework	Lm	22		
29.2.5.9	32mm diameter UPVC condensate drain pipework	Lm	15		
Total carried to Main Summary Page for HVAC BQ/66					

ITEM	DESCRIPTION	UNIT	QTY.	RATE (KES)	AMOUNT (KES)
29.3	<u>Ventilation Systems</u>				
29.3.1	Duct Work Supply and install, Test and Commissioning of GI Ducting Factory Fabricated with Duct Mate Flanges as per specifications. The duct work should comply to BS 4844 & NFPA 90A for supply air, Inclusive of supports, C channel or Tie Angle and Rods, hanger threaded rods, clamp plates, trapeze angle or channel hanger iron, etc as specified in NFPA 90A. The GSM should be 180 GSM coating. Support spacing should be as in the specification or BS EN 15727:2010, NFPA 90A.(Allow for fittings as shown in the drawings and details)				
29.3.1.1	0.8 mm minimum thickness	m ²	202.5		
29.3.1.2	1.0 mm minimum thickness	m ²	474		
29.3.1.3	1.2 mm minimum thickness	m ²	2056		
29.3.2	Flexible Duct Supply, Install, Test and Commission flexible duct with end clamps as required in various sizes as below. The duct shall be fire retardant BS 476 standard approved 5 layer Aluflex as supplied by Systemair or other approved.				
29.3.2.1	160 - mm Dia	m	140		
29.3.3	Grilles and Diffusers				
29.3.3.1	<i>Square Diffuser & Grille (supply and extract system)</i> Systemair ADQ-4-R1Aluminum 4 way blow diffuser with the following next sizes				
29.3.3.1.1	150 x 150 mm	No.	192		
29.3.3.1.2	350 x 350 mm	No.	24		
29.3.3.1.3	450 x 450 mm	No.	25		
29.3.3.1.4	600 x 600 mm	No.	36		
29.3.3.2	Door Grille				
29.3.3.2.1	Supply, installation of 300 x 300 mm door grilles as AEROVAC or equal and approved	No	58		
29.3.3.2.2	Allow for all electrical works including wiring to the fans from the local isolators and connection to the control panel	No	14		
29.3.4	Louvres				
29.3.4.1	Weather Louvre Systemair type WL Aluminium Weather Louvers, Bird Mesh in Cladding for Fresh Air intake with Filter boxes, Filters and non-return dampers for the following Louvre Dimensions. The Filters should have Filtration media of Class F5 or higher as defined by CEN standard EN 779-2002, particles air filters for general ventilation.				

	Filtration media with a minimum dust spot efficiency of 30% or higher and greater 90% arrestance on a particle size of 3-10µg. Provide following size.				
29.3.4.1.1	200 mm x 100 mm	No.	7		
29.3.4.1.2	200 mm x 200 mm	No.	6		
29.3.4.1.3	300 mm x 100 mm	No.	4		
29.3.4.1.4	400 mm x 250 mm	No.	5		
29.3.4.2	Discharge Louvre Systemair type WL Aluminium discharge Louvers, Filters and non-return dampers for the following Louvre Dimensions. The Filters should have Filtration media of Class F5 or higher as defined by CEN standard EN 779-2002, particles air filters for general ventilation. Filtration media with a minimum dust spot efficiency of 30% or higher and greater 90% arrestance on a particle size of 3-10µg. Provide following size.				
29.3.4.2.1	1000x600mm	No.	5		
29.3.4.2.2	1000 x 800mm	No.	6		
29.3.4.2.3	900 x 400mm	No.	7		
29.3.4.2.4	600 x 400 mm	No.	10		
29.3.5	Dampers				
29.3.5.1	Moterised Fire Damper Supply and install moterised fire damperwith fusible link GI construction with calcium cilicate blades. The Fire damper shall have 120 min rating and tested according to EN 1366-2. The unit shall be BMS compatible				
29.3.5.1.1	200 x 100 mm	No.	6		
29.3.5.1.2	400 x 200 mm	No.	8		
29.3.5.1.3	400 x 250 mm	No.	8		
29.3.5.1.4	500 x 200 mm	No.	16		
29.3.5.1.5	500 x 300 mm	No.	10		
29.3.5.1.6	800 x 300 mm	No.	15		
29.3.5.2	Moterised Fresh Air Damper Supply and install moterised fresh air damper with fusible link GI construction with calcium cilicate blades. The damper shall have 120 min rating and tested according to EN 1366-2. The unit shall be BMS compatible with the folowing sizes				
29.3.5.2.1	1000 x 800 mm	No.	6		
29.3.5.3	Volume Control Dampers Supply,Install, Test and Commision Systemair Duct type volume control dampers of GI Construction with BMS compatible and should operate in 5 different modes with the folowing sizes				
29.3.5.3.1	600 x 250 mm	No.	20		
29.3.5.3.2	700 x 200 mm	No.	10		
29.3.5.3.3	700 x 400 mm	No.	10		
29.3.6	Fans				
29.3.6.1	Inline Axial Fan				

	Supply, Install, Test and Commission axial fan with Cast aluminium alloy hub and adjustable blades. Galvanised steel casing manufactured in accordance with DIN EN ISO 1461 and should be sound insulated. IP55 415, 50Hz 3 phase motor, insulation class F (CO ventilation) according to EN 60034-5. The units should be tested in fan test rig in accordance with DIN ISO 5801 and AMCA 210-99. The fan should be BMS Ready, to include isolators including electrical connections and wiring from fan to starter and from starter to fan. The sizes to be as;				
29.3.6.1.1	180m ³ /h, 40pa	No.	2		
29.3.6.1.2	360m ³ /h, 50pa	No.	3		
29.3.6.1.3	2045m ³ /h, 125pa	No.	2		
29.3.6.2	Axial Wall Fans Supply, Install, Test and Commission axial fan with integrated motor protection, bionically designed blade geometry and 100% speed controllable. Galvanised steel square wall plate casing, powder coated (RAL 9005) complete with protection guards/louver shutter. The fans should be BMS Ready. Provide the following sizes				
29.3.6.2.1	16500m ³ /h, 250pa	No.	1		
29.3.6.2.2	28000m ³ /h, 400pa	No.	1		
29.3.6.2.3	21200m ³ /h, 300pa	No.	1		
29.3.6.3	Centrifugal Box Fans Supply, Install, Test and Commission Centrifugal box fan suitable for outdoor installation fitted with a forward curve single inlet impeller and IP 55 F Class motors. The casing should be made of aluminum profile structure and at least 1 mm galvanized steel panels fitted with 15 mm (minimum) M1 foam insulation or equivalent. The fan should be BMS Ready. Provide following sizes				
29.3.6.3.1	1980m ³ /h, 50pa	No.	1		
29.3.6.3.2	20035m ³ /h, 350pa	No.	1		
29.3.6.3.3	3780m ³ /h, 150pa	No.	1		
29.3.6.3.4	6250m ³ /h, 150pa	No.	1		
29.4.0	<u>Staircase Pressurization</u> Axial Flow Fans Supply, Install, Test and Commission axial fan with Cast aluminium alloy hub and blades. Galvanised steel casing made in accordance with DIN EN ISO 1461 coupled with sound insulation. 415V, 50Hz, 3 PH motor, insulation class F (CO ventilation) according to EN 60034-5. Units should be tested in accordance with DIN ISO 5801 and AMCA 210-99. Provide the following sizes.				
29.4.1	11.5 m ³ /s, 300pa	No	2		
29.4.2	Ducting Supply and Install fire approved ducting of the following thicknesses. The duct should be SANS 193 approved or EN 12101-3 approved 1 mm minimum thickness	SQM	60		

29.4.3	Supply Air Register Supply and Install wall mounted Fire resistant Air Registers capable of 2.5 m3/s flow rate complete with integrated Volume Control Dampers (capable of operating in five different modes). Provide for the following sizes. 350 x 350 mm	No	35		
Total carried to summary page					
29.5	<u>Refuse Chute Installations</u>				
29.5.1	Extract Fan Supply, Install, Test and Commission axial fan with Cast aluminium alloy hub and adjustable blades. Galvanised steel casing manufactured in accordance with DIN EN ISO 1461 and should be sound insulated. IP55 415, 50Hz 3 phase motor, insulation class F (CO ventilation) according to EN 60034-5. The units should be tested in fan test rig in accordance with DIN ISO 5801 and AMCA 210-99. The fan should be BMS Ready, to include isolators including electrical connections and wiring from fan to starter and from starter to fan. The sizes to be as; 180m3/h, 40pa	No.	1		
29.5.2	Trash Chute Supply and install a 400 mm diameter trash chute manufactured from 2 mm thick galvanised mild steel sheet including ventilation flue pipe for the refuse chute. It shall terminate at the roof floor. The total length of the chute is 40m long	SQM	58		
29.5.3	Access door & Hopper Supply and install 350 x 350 mm hinged and rodable access door with retractable mechanism on the appropriate floor as shown on the contract drawing.	No.	12		
29.5.4	Metalic Waste Bin Supply and install a portable 1500 liter waste-bin in the refuse room made of stainless steel	No.	1		
29.5.4.1	Allow for any other sundries including supports and fittings to make the solid waste chute functional.	Sum	1		
29.5.5.1					
Total carried to summary page BQ/64					

ITEM	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
					SHS.
29.6	Kitchen Installations				
29.6.1	Centrifugal box Fan Centrifugal Fan, double exhaust fan in box casing with motor coupled to the fan wheel (forward shovels) through pulleys and belts. Structural shape aluminium frame, zinc plate panel with noise reduction and flame proof lining. CONSTRUCTION; The hopper consists of a structure of extruded profiles of oxidized aluminum P30 or P40 and nylon corner with glass fiber. FAN; The centrifugal fan double inlet is constructed robust galvanized hot .2kW. Rpm 1400. 3 phase connection. The fan capacity to be as;				
29.6.1.1	1200m3/h, 150pa	No	1		
29.6.2	Kitchen Hood Stainless steel island type box shaped. Bolted panel design complete with sloping filter housing with double sided V shaped sloping filter housing, frame to have perforation for deoiling, body frame to have oil collecting channel and plugged holes for working and draining. recessed spot lights complete box mounted on painted ms frame, top end clad with GI sheeting, suitable sized cut out for duct connection, 4 or 6 nos corner brackets for mounting on ceiling or side walls. The size to be as;				
29.6.2.1	2500mm x 1300mm x 400mm Stainless steel grease filters with S shape fire retardant channels in heavy duty construction with drip holes. The size to be as;	No	1		
29.6.2.2	300 mm x 300 mm	No.	18		
29.6.3	Duct work Duct made of 22 SWG G.I Sheets with 6 bends , 2 transition pieces with a goose neck and end piece fitted with expanded mesh to prevent rodents and birds from getting into the duct line and Mounting brackets. The duct sizes to be 350mm x 350mm	SQM	80		
	Total carried to summary page				
ITEM	DESCRIPTION	UNIT	QTY.	RATE(KES)	AMOUNT KES
29.7	Basement Ventilation				
29.7.1	Basement Fan Supply, deliver and install two speed (21000m3/h-32000m3/h @ 200Pa), 300°C/2h, garage FANS with all accessories to include	No.	2		

29.7.2	isolators including electrical connections and wiring from fan to starter and from starter to fan hangers, supports, vibration isolators, controls, control panel and fixing required for the satisfactory execution operation and completion of the work. Galvanised steel casing manufactuerd in accordance with DIN EN ISO 1461 and should be sound insulated. IP55 415, 50Hz 3 phase motor, insulation class F (CO ventilation) according to EN 60034-5, the units should be tested in fan test rig in accordance with DIN ISO 5801 and AMCA 210-99. The fan should be BMS Ready Supply, deliver and install Smoke Extraction Control Panel and CO sensors for monitoring and control of exhaust fans (two speed (21000m3/h-32000m3/h @ 200Pa), 300°C/2h, with all accessories including but not limited to hangers, supports, vibration isolators, controls, control panel and fixing required for the satisfactory execution operation and completion of the work	No.	1		
Total carried to summary page BQ/64					

29.8

SUMMARY

ITEM	DESCRIPTION	AMOUNT (KES)
29.8.1	Total for Preliminary & Conditions of Contracts	
29.8.2	Total for Air Conditioning Systems	
29.8.3	Total for Ventilation Systems	
29.8.4	Total for Refuse Chute	
29.8.5	Total for Kitchen Installations	
29.8.6	Total for Basement Fans	
	Total Carried to Services Summary Page	

30. BILL 30: BOREHOLE DRILLING AND EQUIPPING

BILL 30: BOREHOLE DRILLING AND EQUIPPING					
Item	Description	Qty.	Unit	Rate (Ksh)	Amount (Ksh)
30.1	PRELIMINARY BOREHOLE SURVEY				
30.1.1	Reconnaissance surveys. This inclusive comprehensive desk study on the Site	1	Lot.		
30.1.2	Mobilize to the site of works and carry out comprehensive mapping using resistivity methods. (Hydro geological / Geophysical Borehole site investigation.)	1	Lot.		
30.1.3	Compile detailed – survey report on the survey finds	1			
30.1.4	Application and follow – up of the necessary drilling Authorization for the Borehole works	1	Lot.		
30.2	ENVIRONMENTAL ASSESSMENT PHASE				
30.2.1	Conduct a comprehensive NEMA Assessment on the program. This inclusive of report compilation to statutory requirements	1	Lot.		
30.2.2	Payments of statutory amounts to Governments for the entire project.	1	Lot.		
30.3	BOREHOLE DRILLING				
30.3.1	Mobilization set up/ camp /restitution /demobilization on completion.	1	Lot.		
30.3.2	Drilling rig set –up at the site	1	Lot.		
30.4	DRILLING				
30.4.1	Depth not exceeding 5.0 metres for the conductor pipe – 254mm Diameter	5	M		
30.4.2	Drilling at 225mm for the depth 5.0m – 100.0m	95	M		
30.4.3	Drilling at 225mm for the depth 100 – 200.0m	100	M		
30.4.4	Drilling at 225mm for the depth > 200.0m	100	M		
30.4.5	Sampling and logging works at 2.0m intervals	125	No.		
30.4.6	Anticipated Drilling foam usage – for improvement of cuttings recovery	1	Lot.		
30.4.7	Supply drilling and domestic water for both down hole injection and domestic purposes at the site	1	Lot.		
	Total Carried to Next Page				

					AMOUNT
Item	Description	Qty.	Unit	Rate (Kes)	Shs.
	Total bf from previous page				
30.5	CASING & SCREEN				
30.5.1	153mm diameter Steel casings class B-Plain	220	M		
30.5.2	153mm diameter Steel screens class B in plasma slots.	80	M		
30.5.3	154mm slide in borehole cap	1	No.		
30.5.4	Supply and install quartz pea gravel, 2-4 mm grain size	8	Ton		
30.5.5	Backfill to 10 metres below ground level with drill cuttings.	10	M		
30.6	BOREHOLE DEVELOPMENT				
30.6.1	Chemical development through Calgon injection.	25	Kgs		
30.6.2	Physical development through air-jetting techniques	4	Hr		
30.7	AQUIFFER TESTING				
30.7.1	Mobilization of test pumping	2	Lot.		
30.7.2	Installation of test-pumping unit & removal	1	Lot.		
30.7.3	Testing (Recovery Test)	6	Hr		
30.7.4	Water sample for chemical & physical analysis	1	Lot.		
30.7.5	Borehole head works complete – plinth	1	No.		
30.7.6	Temporary casings for the conductor pipe.	1	M		
30.7.7	Documentation Form WRMA 009A	1	No.		
30.8	Total Carried to Borehole Drilling Summary Page SUPPLY & INSTALLATION OF ELECTRIC WATER PUMP Multistage stainless steel submersible pump in tie strap version for vertical and horizontal installation Ø of hydraulic unit in inches: 6 Rated volume flow at optimum efficiency (m ³ /hr): 10 Number of hydraulic stages: 40 Motor Construction type: prefilled with waterglycol mixture and rewindable Motor material version: Final parts made of stainless steel Diameter of the motor in inches ["]: 6				
	Total Carried to Next Page				

					AMOUNT
Item	Description	Qty.	Unit	Rate (Kes)	Shs.
	Total bf from previous page				
30.8.1	Rated motor power P ₂ in kW: 15 as WILO Borehole pump Model: Xiro SPI 6.10-40-A1/XI6-15-B1 or an approved equivalent. <i>Note: The pump head and flow rate to be sized after depth of the borehole is determined.</i>	1	No.		
30.8.2	Pump control panel; EDOL 15kw complete with PLAV	1	No.		
30.8.3	Pump TPN switch Fuse	1	No.		
30.8.4	Submersible cable 10mm2x 4core flat	255	M		
30.8.5	10mm2 x 4core armoured cable	30	M		
30.8.6	Water proof cable joint	1	No.		
30.8.7	Electrode cable black	255	M		
30.8.8	Electrode cable brown	255	M		
30.8.9	Electrode probes	2	No.		
30.8.10	Borehole pipes 2.5" supa heavy 350m	84	No.		
30.8.11	Airline pipes	42	No.		
30.8.12	Adaptor set 2.5" super heavy	1	No.		
30.8.13	Cover sundries 2.5" x 6"	1	No.		
30.8.14	Water meter 2.5"	1	No.		
30.8.15	Earth rod 4ft	1	No.		
30.8.16	Earth clamp	1	No.		
30.8.17	6.0mmx 1 core cable green earth cable	5	M		
30.8.18	Installation accessories	1	Lot.		
30.8.19	Electrical works, testing & commissioning	1	Lot.		
30.8.20	Transport & lowering	1	Lot.		
	Total For Borehole Equipping				
	Total for Borehole Drilling				
	Total for Borehole Drilling and Equipping Carried to Bill No.31: Services				

31. BILL 31: SERVICES

Bill No.	Description	Amount
	ELECTRICAL WORKS	
24	Electrical	
25	Fire Alarm & Public Address	
26	Lifts	
27	Generator Installations	
	Sub Total For Electrical Works	
	MECHANICAL WORKS	
28	Plumbing, Drainage & Fire Fighting	
29	Heating, Ventilation & Airconditioning	
30	Borehole Drilling and Equiping	
	Sub Total For Mechanical Works	
	TOTAL FOR SERVICES WORKS CARRIED TO GRAND SUMMARY	

32. GRAND SUMMARY

Contract Name: CONSTRUCTION OF FISHERIES HEADQUARTERS –

“ UVUVI HOUSE”

RFBNo.: KE-MOALF-2021-001-CW-RFB

<i>General Summary</i>	<i>Page</i>	<i>Amount</i>
Bill No. 1: PARTICULAR PRELIMINARIES	1-1	
Bill No. 2: GENERAL PRELIMINARIES	2-1	
BILL NO. 17 BUILDER'S WORK SUMMARY PAGE	17-1	
BILL NO. 18 : SERVICE BUILDING	18-1	
BILL NO. 19 : LANDSCAPING	19-1	
BILL NO. 20: SIGNAGE	20-1	
BILL NO. 21 : CIVIL WORKS & PARKING	21-1	
BILL NO. 22: DAYWORKS	22-1	
BILL NO. 23: ESMP	23-1	
BILL NO. 31: SERVICES	31-1	
<i>Subtotal of Bills</i>	<i>(A)</i>	
<i>Total for Daywork (Provisional Sum)*</i>	<i>(B)</i>	
<i>Provisional Sum of Kenya Shillings Eighteen Million (Kes 18,000,000.00) for fluctuationsⁱⁱ</i>	<i>(C)</i>	
<i>Total of Bills Plus Provisional Sums (A + B + C)ⁱ</i>	<i>(D)</i>	
<i>Add Provisional Sum of Kenya Shillings Fifteen Million (Kes 15,000,000.00) for Contingency Allowanceⁱⁱ</i>	<i>(E)</i>	
<i>Bid Price (D + E) (Carried forward to Letter of Bid)</i>	<i>(F)</i>	

i) All Provisional Sums are to be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 13.4 and 13.5 of the General Conditions except with respect to DAAB Fees and Expenses for which Sub-Clause 13.4 of the Particular Conditions – Part B shall apply.

ii) To be entered by the Employer.

* For evaluation purposes, Provisional Sum, other than Daywork will be excluded