

# MULTIMEDIA UNIVERSITY OF KENYA

P.O. BOX 15653 - 00503, NAIROBI, KENYA. MAGADI ROAD  
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## **ADDENDUM NO. 2**

TO: ALL BIDDERS

30/03/2026

PROPOSED COMPLETION OF MULTIMEDIA UNIVERSITY OF  
KENYA LIBRARY - NAIROBI COUNTY

TENDER NO. MMU/OT/LIB/03/2025-2026

ELECTRICAL INSTALLATION WORKS AND STRUCTURED CABLING WORKS

AMENDMENT OF SCHEDULE OF REQUIREMENTS (Bill of Quantities)

Our technical team noted an anomaly in the above tender document that needs to be corrected before the submission deadline. MMU therefore wishes to amend the Schedule of Requirements (Bill of Quantities) pursuant to Section 75 of the Public Procurement and Asset Disposal Act 2015.

Please find the revised Schedule of Requirements (Bill of Quantities) here below.

Consequently, the **NEW TENDER SUBMISSION DEADLINE** will be on Tuesday 7<sup>th</sup> April 2026 at 11.00 am

The other requirements in the Original Tender Document remain unchanged.

*f* *Mwalungu*  
VICE CHANCELLOR  
30/3/26



## MULTIMEDIA UNIVERSITY OF KENYA

### PROPOSED PARTIAL COMPLETION OF MULTIMEDIA UNIVERSITY OF KENYA LIBRARY – NAIROBI COUNTY

**TENDER NO. MMU/OT/LIB/03/2025-2026**

W.P. ITEM NO. D1065 NB /NB / 2501 - JOB NO. 11612A  
VOLUME 2/3

**TENDER SPECIFICATIONS AND BILL OF QUANTITIES  
FOR  
ELECTRICAL INSTALLATION WORKS AND STRUCTURED CABLING  
WORKS**

**CLIENT**

THE VICE CHANCELLOR,  
MULTIMEDIA UNIVERSITY OF KENYA,  
NAIROBI

**PROJECT MANAGER**  
**WORKS SECRETARY**

MINISTRY OF LANDS, PUBLIC WORKS,  
HOUSING & URBAN DEVELOPMENT,  
STATE DEPARTMENT FOR PUBLIC WORKS,  
P.O BOX 30743 – 00100,  
NAIROBI

**ELECTRICAL ENGINEER**

**CHIEF ENGINEER (ELECTRICAL)**  
MINISTRY OF LANDS, PUBLIC WORKS,  
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NAIROBI

**ARCHITECT**

**CHIEF ARCHITECT**

MINISTRY OF LANDS, PUBLIC WORKS,  
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STATE DEPARTMENT FOR PUBLIC WORKS,  
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**STRUCTURAL ENGINEER**

**CHIEF STRUCTURAL ENGINEER**  
MINISTRY OF LANDS, PUBLIC WORKS,  
HOUSING & URBAN DEVELOPMENT,  
STATE DEPARTMENT FOR PUBLIC WORKS,  
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**QUANTITY SURVYOR**

**CHIEF QUANTITY SURVEYOR**

MINISTRY OF LANDS, PUBLIC WORKS,  
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NAIROBI

**MECHANICAL ENGINEER**

**CHIEF ENGINEER (MECHANICAL (BS))**

MINISTRY OF LANDS, PUBLIC WORKS,  
HOUSING & URBAN DEVELOPMENT,  
STATE DEPARTMENT FOR PUBLIC WORKS,  
P.O BOX 41191 – 00100,  
NAIROBI

MARCH, 2026

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
ELECTRICAL INSTALLATION WORKS**

**BILL NO.1: SUB-CONTRACT PRELIMINARIES**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
1	Discrepancies clause - Sub-contractor shall include all work either shown on the Contract Drawings or detailed in the specification. No claim or extra cost shall be considered for works which has been shown on the drawings or in the specification alone.	1	Item		
2	Payments clause - Payment will be made through certificates to the Main Contractor, unless he specifically agrees to forego this right, in which case direct payment can be made to the Domestic Sub- contractor. All payments will be less retention as specified in the Main Contract. No payment will become due until materials are delivered to site.	1	Item		
3	Scope of contract works clause - The sub-contractor shall supply, deliver, unload, hoist, fix, test, commission and hand-over in satisfactory working order the complete installations specified hereinafter and/or as shown on the Contract Drawings attached hereto, including the provision of labour, transport and plant for unloading material and storage, and handling into position and fixing	1	Item		
4	Extent of contractors duties clause - The Sub- contractor shall be responsible for verifying all dimensions relative to his work by actual measurements taken on site. Shall mark accurately on one set of drawings and indicate all alterations and/or modifications carried out to the designed system during the construction period. This information must be made available on site for inspection by the Engineer.	1	Item		
5	Government legislation and regulations clause - Sub- contractor shall allow for providing holidays and transport for work people, and for complying with Legislation, Regulations and Union Agreements. The Sub-contractor must also make himself acquainted with current legislation and any Government regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc.	1	Item		
6	Insurance company fees clause - Attention is drawn to the tenderers to allow for all necessary fees, where known, that may be payable in respect of any fees imposed by Insurance Companies or statutory authorities for testing or inspection.	1	Item		
7	Samples and materials generally clause - The Sub- contractor shall, when required, provide for approval at no extra cost, samples of all materials to be incorporated in the works. Such samples, when approved, shall be retained by the Engineer and shall form the standard for all such materials incorporated.	1	Item		
<b>Sub Total carried to next page</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub-Total B/F from Previous Page</b>				
8	Bills of quantities clause - All the Quantities are based on the Contract Drawings and are provisional and they shall not be held to gauge or to limit the amount or description of the work to be executed by the Sub- contractor but the value thereof shall be deducted from the Sub-contract Sum and the value of the work ordered by the Engineer and executed there under shall be measured and valued by the Engineer in accordance with the contract. All work liable to adjustment under this Sub-contract shall be left uncovered for a reasonable time to allow measurements needed for such adjustment to be taken by the Quantity Surveyor or Engineer. Immediately the work is ready for measuring the Sub- contractor shall give notice to the Quantity Surveyor or Engineer to carry out measurements before covering up. If the Sub-contractor shall make default in these respects he shall, if the Architect so directs, uncover the work to enable the necessary measurements to be taken and afterwards reinstate at his own expense.	1	Item		
9	Contractors office in Kenya clause - It shall be the Sub-contractor's responsibility to procure work permits, entry permits, licences, registration, etc., in respect of all expatriate staff. The Sub-contractor shall prepare a substantial proportion of his Working Drawings at his office in Kenya. No reasons for delays in the preparation or submission for approval or otherwise of such drawings or proposals will be accepted on the grounds that the Sub-contractor's Head Office is remote from his office in Nairobi or the site of the Sub- contract Works or otherwise.	1	Item		
10	Identification of plant components clause - Sub-contractor shall supply and fix identification labels to all plant, starters, switches and items of control equipment etc with white traffolyte or equal labels engraved in red lettering denoting its name, function and section controlled.	1	Item		
11	Working drawings clause - Sub-contractor shall prepare such Working Drawings as may be necessary. The Working Drawings shall be complete in such detail not only that the Sub-contract Works can be executed on site but also that the Engineer can approve the Sub-contractor's proposals, detailed designs and intentions in the execution of the Sub- contract Works.	1	Item		
12	Records Drawings (As Installed) and instructions clause - Record Drawings, will be subject to the approval of the Engineer, include approved Working Drawings adjusted as necessary and certified by the Sub-contractor as a correct record of the installation of the Sub-contract Works.	1	Item		
13	Maintenance Manual clause - Upon Practical Completion of the Sub-contract Works, the Sub- contractor shall furnish the Engineer four copies of a Maintenance Manual relating to the installation forming part of all of the Sub-contract Works.	1	Item		
	<b>Sub Total carried to next page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub-Total B/F from Previous Page</b>				
14	Hand over clause - The Sub-contract Works shall be considered complete and the Maintenance and Defects Liability Period shall commence only when the Sub-contract Works and supporting services have been tested, commissioned and operated to the satisfaction of the Engineer and officially approved and accepted by the Employer, provided always that the handing over of the Sub-contract Works shall be coincident with the handing over of the Main Contract Works.	1	Item		
15	Testing and inspection - manufactured plant clause - The Engineer reserves the right to inspect and test or witness of all manufactured plant equipment and materials. The right of the Engineer relating to the inspection, examination and testing of plant during manufacture. Sub-contractor shall give two weeks' notice to the Engineer of his intention to carry out any inspection or tests and the Engineer or his representative shall be entitled to witness such tests and inspections.	1	Item		
16	Testing and inspection - installation clause - Allow for testing each section of the Sub-contract Works installation.	1	Item		
17	Initial Maintenance Clause - The sub-contractor shall make routine maintenance once a month during the liability for the Defects Period and shall carry out all necessary adjustments and repairs, cleaning and oiling of moving parts. A monthly report of the inspection and any works done upon the installation shall be supplied to the Engineer. Shall allow in the sub-contract Sum of the initial maintenance, inspection and break-down service	1	Item		
18	Local and other authorities notice clause - The contractor shall comply with and give all notices required by any Regulations, Act or by Law of any Local Authority or of any Public Service, Company or Authority who have any jurisdiction with regard to the works or with those systems the same are or will be connected and he shall pay and indemnify the Government against any fees or charges legally demandable under any regulation or by-law in respect of the works; provided that the said fees and charges if not expressly included in the contract sum or stated by way of provisional sum shall be added to the contract sum.	1	Item		
19	Temporary Works clause - The contractor shall include for the cost of and make necessary arrangements with the Project Manager for such temporary works.	1	Item		
20	Patent Rights clause - The contractor shall fully indemnify the Government of Kenya; against any action, claim or proceeding relating to infringement of any patent or design rights, and pay any royalties which may be payable in respect of any article or any part thereof, which shall have been supplied by the contractor to the Project Manager.	1	Item		
	<b>Sub Total carried to next page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub-Total B/F from Previous Page</b>				
21	Mobilization and Demobilization clause -No claim will be entertained where the contractor has not made any provision for mobilization and demobilization of labour, plant and equipment in the preliminary bills of quantities.	1	Item		
23	Allow for Taxes, Profit and Attendance for the above Item		%		
24	Contract obligation and employers obligation clause - No claims will be entertained for pre-financing of the project by the sub-contractor, or for loss of profit (expectation loss) in case of premature termination, reduction or increase of works as the sub-contractor shall be deemed to have taken adequate measures in programming his works and expenditure and taken necessary financial precaution while executing the works.	1	Item		
25	Any other preliminaries	1	Item		
<b>Total for Bill No. 1: Sub-Contract Preliminaries C/F to Summary Page</b>					

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
BILL NO. 2-SCHEDULE NO. 2: GROUND FLOOR ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<b>Supply, Install, Test and Commission the foollowing: LIGHTING POINTS</b>				
2.01	Allow for testing and troubleshooting of existing wiring for lighting points and marking of the circuits as wired.	Item	1		
2.02	Allow for rewiring of lighting points using 3 x 1.5mm <sup>2</sup> PVC insulated Copper cables to be drawn in Existing PVC conduits concealed in slab and building walls.	No	50		
2.03	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as described in the particular specifications.				
	(a) One gang one way	No	5		
	(b) Two gang two way	No	5		
	(c) One gang two way	No	3		
	(d) Three gang one way	No	1		
	(f) Six gang 2 way switch	No	4		
2.04	<b>LIGHT FITTINGS</b>				
	(a) 600mm by 600mm LED recessed panel, 3600lm, 6500K UGR≤19 as described in the particular specifications.	No	6		
	(b) 600mm by 600mm LED recessed panel, 3600lm, 6500K UGR≤19 complete with 3 hour emergency lighting kit as described in the particular specifications.	No	5		
	(c) 20W, 4000K, 1600lm, IP65, LED rectangular Bulk head for wall mounting as described in the particular specifications.	No.	3		
	(d) Self-contained single sided LED EXIT sign with non-maintained emergency lighting for 3 hour duration.	No.	7		
	(e) 5W Outdoor IP65 LED Rectangular step light.	No.	20		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
<i>Total brought forward from previous page</i>					
<b>SOCKET OUTLETS</b>					
2.05	Allow for testing and troubleshooting of existing wiring for Sockets and marking of the circuits as wired.	Item	1		
2.06	Allow for rewiring of socket outlet points comprising 3x2.5mm <sup>2</sup> PVC-SC-Cu cables concealed in trunking and existing conduits.	No.	36		
2.07	13A switched twin socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	18		
2.08	13A switched single socket outlet mounted on trunking/wall/floor box as described in the particular	No	28		
2.09	Recessed Floor box, with metal base box, inclusive of cover lid to IP65, twin punched socket outlet and data/telephone outlet and fixing accessories as described in the particular specifications.	No.	8		
<b>OTHER POWER POINTS</b>					
2.10	Power point wired in 3 x 4.0mm <sup>2</sup> SC/PVC insulated copper cables drawn in concealed 25mm diameter HG/PVC conduits and including all the other accessories. (Instant Shower or Undersink Heater) (Approx 25m)	No	1		
2.11	20A DP control switch marked 'Water Heater' with neon light and cord outlet for item above as described in the particular specifications.	No	1		
2.12	Power point wired in 3 x 6.0mm <sup>2</sup> SC/PVC insulated copper cables drawn in concealed 25mm diameter HG/PVC conduits and including all the other accessories (Approximately 15M) . (COOKER UNIT)	No.	1		
2.13	45A rated cooker control unit incorporating a 13A switched socket outlet and pilot neon light complete with the connector unit	No.	1		
<b>TRUNKING</b>					
2.14	170x50mm three compartment PVC Trunking, complete with covers, bends and all fixing accessories for repair of existing one in damaged sections.	LM	0		
	a) End covers for item above	No.	20		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<i>Total brought forward from previous page</i>				
	<b>INTERNAL POWER DISTRIBUTION</b>				
2.15	Miniature Circuit Breakers to fit into an existing Schneider 6 way Distribution Boards, installed in the power ducts and kitchen, as follows:				
	(i) 10A SP	No.	10		
	(ii) 20A SP	No.	1		
	(iii) 30A SP	No.	10		
	(iv) Blanking Plate	No.	15		
	<b>SUB-MAINS CABLES</b>				
2.16	16mmsq 4C PVC/SWA/PVC copper cables strapped on a cable trays inside ceiling and electrical ducts from the sub-LV boards to DBs in Ground floor.	LM	200		
	<b>PWD TOILET ALARM SYSTEM</b>				
2.17	Toilet alarm system(disabled persons alarm kit) in the PWD toilet complete buzzer, indicator, panic button and wiring	Item	1		
	<b>FIRE ALARM SYSTEM</b>				
2.18	Allow for troubleshooting and testing of the existing fire alarm points as wired for the various system devices as per the design drawings.	Item	1		
2.19	Firealarm outlet point comprising wiring in 1.5mm <sup>2</sup> 3C fire resistant copper cable in 20mm diameter HG conduits concealed in the ceiling	No	5		
2.20	Addressable Photoelectric Smoke Detector complete with base as described in the particular specifications.	No	21		
2.21	Addressable Manual resettable call points as described in the particular specifications..	No	6		
2.22	Addressable Photoelectric Heat Detector complete with base and as described in the particular specifications.	No	1		
2.23	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon(Visual alarm) as as described in the particular specifications.	No	4		
2.24	Addressable 4 loop panel, wall mounted with 72 hour standby battery complete with all accessories as described in the particular specifications.	No.	1		
2.25	Power point wired in 3 x 2.5mm <sup>2</sup> SC/PVC insulated copper cables drawn in concealed 25mm diameter HG/PVC conduits for Fire alarm panel complete with 20A DP switch with neon light.	No.	1		
	<b>TOTAL FOR GROUND FLOOR CARRIED FORWARD TO PRICE SUMMARY PAGE.</b>				

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
BILL NO. 2-SCHEDULE NO. 3: FIRST FLOOR ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<b>Supply, Install, Test and Commission the following: LIGHTING POINTS</b>				
3.01	Allow for rewiring of lighting points using 3 x 1.5mm <sup>2</sup> PVC insulated Copper cables to be drawn in Existing 20mm diameter PVC conduits concealed in slab and building walls and for one way switching but excluding the fittings and	No	50		
3.02	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as described in the particular specifications.				
	(a) Two gang one way	No	2		
	(b) One gang two way	No	6		
	(c) Three gang two way	No	2		
	(d) Four gang two way	No	1		
	(e) Six gang 2 way switch	No	3		
	<b>LIGHT FITTINGS</b>				
3.03	Supply and install the following lighting fittings				
	(a) 600mm by 600mm LED recessed panel, 3600lm, 6500K UGR≤19 as described in the particular specifications.	No	25		
	(b) 600mm by 600mm LED recessed panel, 3600lm, 6500K UGR≤19 complete with 3 hour emergency lighting kit as described in the particular specifications.	No	15		
	(c) LED down Light 15W, 1600lm, 4000K, of diameter 200mm as described in the particular specifications.	No	5		
	(d) Self-contained single sided LED EXIT sign with non-maintained emergency lighting for 3 hour duration.	No.	5		
	<b>SOCKET OUTLETS</b>				
3.04	Allow for testing and troubleshooting of existing wiring for Sockets and marking of the circuits as wired.	Item	1		
3.05	Allow for rewiring of socket outlet points comprising 3x2.5mm <sup>2</sup> PVC-SC-Cu cables concealed in trunking and existing conduits.	No.	36		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
<i>Total brought forward from previous page</i>					
3.06	13A switched twin socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	18		
3.07	13A switched single socket outlet mounted on trunking/wall/floor box as described in the particular	No	28		
3.08	Recessed Floor box, with metal base box, inclusive of cover lid to IP65, twin punched socket outlet and data/telephone outlet and fixing accessories as described in the particular specifications.	No.	8		
<b>TRUNKING</b>					
3.09	170x50mm three compartment PVC Trunking, complete with covers, bends and all fixing accessories for repair of existing one in damaged sections.	LM	0		
	a) End covers for item above	No.	18		
<b>INTERNAL POWER DISTRIBUTION</b>					
3.10	Miniature Circuit Breakers to fit into an existing Schneider 6 way Distribution Boards, installed in the power ducts and kitchen, as follows:				
	(i) 10A SP	No.	10		
	(ii) 20A SP	No.	1		
	(iii) 30A SP	No.	10		
	(iv) Blanking Plate	No.	15		
<b>SUB-MAINS CABLES</b>					
3.11	16mmsq 4C PVC/SWA/PVC copper cables strapped on a cable trays inside ceiling and electrical ducts from the sub-LV boards to DBs in Ground floor.	LM	160		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<i>Total brought forward from previous page</i>				
	<b>FIRE ALARM SYSTEM</b>				
3.12	Allow for troubleshooting and testing of the existing fire alarm points as wired for the various system devices as per the design drawings.	Item	1		
3.13	Firealarm outlet point comprising wiring in 1.5mm <sup>2</sup> 3C fire resistant copper cable in 20mm diameter HG conduits concealed in the ceiling	No	5		
3.14	Addressable Photoelectric Smoke Detector complete with base as described in the particular specifications.	No	23		
3.15	Addressable Manual resettable call points as described in the particular specifications..	No	5		
3.16	Addressable Photoelectric Heat Detector complete with base and as described in the particular specifications.	No	1		
3.17	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon(Visual alarm) as as described in the particular specifications.	No	4		
	<b>TOTAL FOR FIRST FLOOR CARRIED FORWARD TO PRICE SUMMARY PAGE.</b>				

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
BILL NO. 2-SCHEDULE NO. 4: SECOND FLOOR ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<b>Supply, Install, Test and Commission the following: LIGHTING POINTS</b>				
4.01	Allow for testing and troubleshooting of existing wiring for lighting points and marking of the circuits as wired.	Item	1		
4.02	Allow for rewiring of lighting points using 3 x 1.5mm <sup>2</sup> PVC insulated Copper cables to be drawn in Existing PVC conduits concealed in slab and building walls.	No	60		
4.03	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as described in the particular specifications.				
	(a) One gang one way	No	9		
	(b) Two gang one way	No	10		
	(c) One gang two way	No	0		
	(d) Three gang one way	No	1		
	(e) Four gang two way	No	0		
	(f) Six gang 2 way switch	No	3		
4.04	<b>LIGHT FITTINGS</b>				
	(a) 600mm by 600mm LED surface panel, 3600lm, 6500K UGR≤19 as described in the particular specifications.	No	123		
	(b) 600mm by 600mm LED surface panel, 3600lm, 6500K UGR≤19 complete with 3 hour emergency lighting kit as described in the particular specifications.	No	35		
	(c) LED down Light 20W, 2000lm, 4000K, surface mounted and as described in the particular specifications.	No	33		
	(d) 1200mm Twin water proof batten fitting complete with 1800lm 18W, LED tubes	No	8		
	(e) Self-contained single sided LED EXIT sign with non-maintained emergency lighting for 3 hour duration.	No.	8		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
<i>Total brought forward from previous page</i>					
<b>SOCKET OUTLETS</b>					
4.05	Allow for testing and troubleshooting of existing wiring for Sockets and marking of the circuits as wired.	Item	1		
4.06	Allow for rewiring of socket outlet points comprising 3x2.5mm <sup>2</sup> PVC-SC-Cu cables concealed in trunking and existing conduits.	No.	36		
4.07	13A switched twin socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	69		
4.08	13A switched single socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	33		
4.09	Recessed Floor box, with metal base box, inclusive of cover lid to IP65, twin punched socket outlet and data/telephone outlet and fixing accessories as described in the particular specifications.	No.	8		
<b>OTHER POWER POINTS</b>					
4.10	Power point wired in 3 x 4.0mm <sup>2</sup> SC/PVC insulated copper cables drawn in concealed 25mm diameter HG/PVC conduits and including all the other accessories. (Instant Shower or Undersink Heater) (Approx 25m)	No	1		
4.11	20A DP control switch marked 'Water Heater' with neon light and cord outlet for item above as described in the particular specifications.	No	1		
4.12	Power point wired in 3 x 6.0mm <sup>2</sup> SC/PVC insulated copper cables drawn in concealed 25mm diameter HG/PVC conduits and including all the other accessories (Approximately 15M) . (COOKER UNIT)	No.	1		
4.13	45A rated cooker control unit incorporating a 13A switched socket outlet and pilot neon light complete with the connector unit	No.	1		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<i>Total brought forward from previous page</i>				
	<b>TRUNKING</b>				
4.14	170x50mm three compartment PVC Trunking, complete with covers, bends and all fixing accessories for repair of existing one in damaged sections.	LM	60		
	a)Compartment PVC trunking Switch box for fixing twin socket outlets	No.	10		
	b)Ditto but for data/telephone outlets	No.	10		
	c) Inside corner bends	No.	6		
	d) Outside corner bends	No.	8		
	e) End covers	No.	20		
	<b>INTERNAL POWER DISTRIBUTION</b>				
4.15	Miniature Circuit Breakers to fit into an existing Schneider 6 way Distribution Boards, installed in the power ducts and kitchen, as follows:				
	(i) 10A SP	No.	11		
	(ii) 20A SP	No.	1		
	(iii) 30A SP	No.	18		
	(iv) Blanking Plate	No.	15		
	<b>SUB-MAINS CABLES</b>				
4.16	16mmsq 4C PVC/SWA/PVC copper cables strapped on a cable trays inside ceiling and electrical ducts from the sub-LV boards to DBs in Ground floor.	LM	220		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
<i>Total brought forward from previous page</i>					
<b>FIRE ALARM SYSTEM</b>					
4.17	Allow for troubleshooting and testing of the existing fire alarm points as wired for the various system devices as per the design drawings.	Item	1		
4.18	Firealarm outlet point comprising wiring in 1.5mm <sup>2</sup> 3C fire resistant copper cable in 20mm diameter HG conduits concealed in the ceiling	No	5		
4.19	Addressable Photoelectric Smoke Detector complete with base as described in the particular specifications.	No	23		
4.20	Addressable Manual resettable call points as described in the particular specifications..	No	5		
4.21	Addressable Photoelectric Heat Detector complete with base and as described in the particular specifications.	No	1		
4.22	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon(Visual alarm) as as described in the particular specifications.	No	4		
<b>TOTAL FOR SECOND FLOOR CARRIED FORWARD TO PRICE SUMMARY PAGE.</b>					

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
BILL NO. 2-SCHEDULE NO. 5: THIRD FLOOR ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<b>Supply, Install, Test and Commission the following: LIGHTING POINTS</b>				
5.01	Allow for testing and troubleshooting of existing wiring for lighting points and marking of the circuits as wired.	Item	1		
5.02	Allow for rewiring of lighting points using 3 x 1.5mm <sup>2</sup> PVC insulated Copper cables to be drawn in Existing PVC conduits concealed in slab and building walls.	No	60		
5.03	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as described in the particular specifications.				
	(a) One gang one way	No	10		
	(b) Two gang one way	No	7		
	(c) One gang two way	No	0		
	(d) Three gang two way	No	3		
	(e) Four gang two way	No	0		
	(f) Six gang 2 way switch	No	3		
5.04	<b>LIGHT FITTINGS</b>				
	(a) 600mm by 600mm LED surface panel, 3600lm, 6500K UGR≤19 as described in the particular specifications.	No	125		
	(b) 600mm by 600mm LED surface panel, 3600lm, 6500K UGR≤19 complete with 3 hour emergency lighting kit as described in the particular specifications.	No	35		
	(c) LED down Light 20W, 2000lm, 4000K, surface mounted and as described in the particular specifications.	No	33		
	(d) 1200mm Twin water proof batten fitting complete with 1800lm 18W, LED tubes	No	6		
	(e) Self-contained single sided LED EXIT sign with non-maintained emergency lighting for 3 hour duration.	No.	6		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS	KSHS
	<i>Total brought forward from previous page</i>					
	<b>SOCKET OUTLETS</b>					
5.05	Allow for testing and troubleshooting of existing wiring for Sockets and marking of the circuits as wired.	Item	1			
5.06	Allow for rewiring of socket outlet points comprising 3x2.5mm <sup>2</sup> PVC-SC-Cu cables concealed in trunking and existing conduits.	No.	35			
5.07	13A switched twin socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	55			
5.08	13A switched single socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	28			
	<b>TRUNKING</b>					
5.09	170x50mm three compartment PVC Trunking, complete with covers, bends and all fixing accessories for repair of existing one in damaged sections. Allow for colour change to Architect's detail.	LM	170			
	a)Compartment PVC trunking Switch box for fixing twin socket outlets	No.	55			
	b)Ditto but for data/telephone outlets	No.	20			
	c) Inside corner bends	No.	18			
	d) Outside corner bends	No.	10			
	e) End covers	No.	20			
	<b>INTERNAL POWER DISTRIBUTION</b>					
5.10	Miniature Circuit Breakers to fit into an existing Schneider 6 way Distribution Boards, installed in the power ducts, as follows:					
	(i) 10A SP	No.	10			
	(ii) 30A SP	No.	16			
	(iii) Blanking Plate	No.	10			
	<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS	KSHS
	<i>Total brought forward from previous page</i>					
	<b>SUB-MAINS CABLES</b>					
5.11	16mmsq 4C PVC/SWA/PVC copper cables strapped on a cable tray inside an electrical duct from the sub-LV boards to DBs in Second floor	LM	180			
	<b>FIRE ALARM SYSTEM</b>					
5.12	Allow for troubleshooting and testing of the existing fire alarm points as wired for the various system devices as per the design drawings.	Item	1			
5.13	Firealarm outlet point comprising wiring in 1.5mm <sup>2</sup> 3C fire resistant copper cable in 20mm diameter HG conduits concealed in the ceiling	No	5			
5.14	Addressable Photoelectric Smoke Detector complete with base as described in the particular specifications.	No	23			
5.15	Addressable Manual resettable call points as described in the particular specifications..	No	5			
5.16	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon(Visual alarm) as as described in the particular specifications.	No	4			
5.17	Addressable Repeater panel, wall mounted with 72 hour standby battery complete with all accessories as described in the particular specifications.	No.	1			
5.18	Power point wired in 3 x 2.5mm <sup>2</sup> SC/PVC insulated copper cables drawn in concealed 25mm diameter HG/PVC conduits for Fire alarm repeater panel complete with 20A DP switch with neon light.	No.	1			
	<b>TOTAL FOR THIRD FLOOR CARRIED FORWARD TO PRICE SUMMARY PAGE.</b>					

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
BILL NO. 2-SCHEDULE NO. 6: FOURTH FLOOR ELECTRICAL WORKS**

ITEM	DESCRIPTION	UNIT	QTY	RATE KSHS	KSHS
	<b>Supply, Install, Test and Commission the following: LIGHTING POINTS</b>				
6.01	Allow for testing and troubleshooting of existing wiring for lighting points and marking of the circuits as wired.	Item	1		
6.02	Allow for rewiring of lighting points using 3 x 1.5mm <sup>2</sup> PVC insulated Copper cables to be drawn in Existing PVC conduits concealed in slab and building walls.	No	60		
6.03	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as described in the particular specifications.				
	(a) One gang one way	No	5		
	(b) Two gang one way	No	10		
	(c) One gang two way	No	0		
	(d) Three gang two way	No	3		
	(e) Four gang two way	No	0		
	(f) Six gang 2 way switch	No	3		
6.04	<b>LIGHT FITTINGS</b>				
	(a) 600mm by 600mm LED surface panel, 3600lm, 6500K UGR≤19 as described in the particular specifications.	No	125		
	(b) 600mm by 600mm LED surface panel, 3600lm, 6500K UGR≤19 complete with 3 hour emergency lighting kit as described in the particular specifications.	No	35		
	(c) LED down Light 20W, 2000lm, 4000K, surface mounted and as described in the particular specifications.	No	39		
	(d) 1200mm Twin water proof batten fitting complete with 1800lm 18W, LED tubes	No	6		
	(e) Self-contained single sided LED EXIT sign with non-maintained emergency lighting for 3 hour duration.	No.	6		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS	KSHS
<i>Total brought forward from previous page</i>						
<b>SOCKET OUTLETS</b>						
6.05	Allow for testing and troubleshooting of existing wiring for Sockets and marking of the circuits as wired.	Item	1			
6.06	Allow for rewiring of socket outlet points comprising 3x2.5mm <sup>2</sup> PVC-SC-Cu cables concealed in trunking and existing conduits.	No.	40			
6.07	13A switched twin socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	69			
6.08	13A switched single socket outlet mounted on trunking/wall/floor box as described in the particular specifications.	No	28			
6.09	Recessed Floor box, with metal base box, inclusive of cover lid to IP65, twin punched socket outlet and data/telephone outlet and fixing accessories as described in the particular specifications.	No.	4			
<b>TRUNKING</b>						
6.10	170x50mm three compartment PVC Trunking, complete with covers, bends and all fixing accessories.	LM	165			
	a)Compartment PVC trunking Switch box for fixing twin socket outlets	No.	65			
	b)Ditto but for data/telephone outlets	No.	21			
	c) Inside corner bends	No.	20			
	d) Outside corner bends	No.	10			
	e) End covers	No.	20			
<b>INTERNAL POWER DISTRIBUTION</b>						
6.11	Miniature Circuit Breakers to fit into an existing Schneider 6 way Distribution Boards, installed in the power duct, as follows:					
	(i) 10A SP	No.	10			
	(ii) 30A SP	No.	16			
	(iii) Blanking Plate	No.	10			
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>						

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS	KSHS
	<i>Total brought forward from previous page</i>					
	<b>SUB-MAINS CABLES</b>					
0.01	16mmsq 4C PVC/SWA/PVC copper cables strapped on a cable tray inside an electrical duct from the sub-LV boards to DBs in Second floor	LM	190			
	<b>FIRE ALARM SYSTEM</b>					
0.01	Allow for troubleshooting and testing of the existing fire alarm points as wired for the various system devices as per the design drawings.	Item	1			
0.02	Firealarm outlet point comprising wiring in 1.5mm <sup>2</sup> 3C fire resistant copper cable in 20mm diameter HG conduits concealed in the ceiling	No	5			
0.03	Addressable Photoelectric Smoke Detector complete with base as described in the particular specifications.	No	23			
0.04	Addressable Manual resettable call points as described in the particular specifications..	No	5			
0.05	Addressable Photoelectric Heat Detector complete with base and as described in the particular specifications.	No	1			
0.06	Addressable Electronic Fire Alarm sounder complete with Red Flashing beacon(Visual alarm) as as described in the particular specifications.	No	4			
	<b>TOTAL FOR FOURTH FLOOR CARRIED FORWARD TO PRICE SUMMARY PAGE.</b>					

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA****SCHEDULE NO. 8 POWER HOUSE ELECTRICAL WORKS**

<b>Item</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate (Kshs)</b>	<b>Amount (Kshs)</b>
	<b>Supply, Install, test and commission the following :</b>				
	<b>LIGHTING POINTS</b>				
8.01	Lighting points comprising wiring in 3x1.5mmsq Single Core PVC insulated Copper Cables drawn in concealed 20mm Diameter HG PVC conduits complete with all necessary accessories but excluding switches for:- (a) One Way Switching.	9	No.		
8.02	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as described in the particular specifications. (a) 1 gang 1 way (b) 1 gang 1 way Weatherproof Switch	3 1	No. No.		
	<b>LIGHTING FITTINGS</b>				
8.03	Lighting fittings complete with all accessories including lamps of appropriate wattage and colour rendering and fixing materials as follows: (a) 1200mm, 1800lm LED Surface Mounted, waterproof batten complete with 3 hour emergency internal battery, IP65 luminaire as described in the particular specifications. (b) 20W LED Outdoor Bulkhead with Opal Diffuser, grill & visor and IP65 protection	6 3	No. No.		
	<b>POWER POINTS</b>				
8.04	Ring mains socket outlets comprising wiring in 3x2.5mm sq. single core PVC insulated copper cables drawn in concealed 25 mm diameter Heavy Gauge PVC conduits complete with all the necessary accessories.	2	No.		
<b>TOTAL CARRIED FORWARD TO THE NEXT PAGE</b>					

<b>SCHEDULE NO. 2 POWER HOUSE</b>					
<b>Item</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate (Kshs)</b>	<b>Amount (Kshs)</b>
	<b>Sub-Total B/F from Previous Page</b>				
8.05	13A switched white moulded case socket outlet plates as MK Clipsal, BG, Crabtree or an approved equivalent. (a) Twin outlet.	2	No.		
	<b>INTERNAL POWER DISTRIBUTION</b>				
8.06	4-way Distribution Board flush mounted on wall complete with a 100A TP/N integral isolator.	1	No.		
8.07	MCB's for item above				
	(i) 10A SP	1	No.		
	(ii) 32A SP	1	No.		
	(iii) SP Spareway	1	No.		
	(iv) TP Spareway	3	No.		
	<b>SUB-MAIN POWER DISTRIBUTION</b>				
8.08	Sub-main cables comprising of 5x6mm <sup>2</sup> Single Core Copper cables drawn in concealed 38mm <sup>2</sup> Dia. HG PVC conduits and including all necessary accessories (From Main Switchboard to DB in the Power house).	15	Lm.		
<b>TOTAL FOR POWER HOUSE CARRIED FORWARD TO PRICE SUMMARY PAGE.</b>					

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
BILL NO. 2-SCHEDULE NO. 9: POWER DISTRIBUTION**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>Take possession of client supplied Low voltage Sub-distribution boards and 240KVA Power Factor Correction Bank.</b>				
	<b>LV SUB-BOARD INSTALLATION</b>				
9.01	Allow for the cleaning and testing of LV-sub board.	1	Item		
9.02	Install test and commission 1 No. LV sub-board in the Power house	1	Item		
9.03	Allow for installation of client supplied 4 No. 100A MCCB on the spare provisions of the LV board.	1	Item		
	<b>POWER FACTOR CORRECTION BANK</b>				
9.04	Allow for the cleaning testing, installation and reconfiguration of The 240KVar Power Factor Correction bank in the new power house.	1	Item		
9.05	Allow for Integration of above Power factor Correction bank to the Main Busbars of the LV-Sub board via 500A Adj (I <sub>r</sub> = 0.5-1 x I <sub>n</sub> ) TPN MCCB and 120mmsq 4C XPLE/SWA/PVC cable (approximately 10M) complete with cable glands and all other necessary accessories.	1	Item		
	<b>Supply, Install, Test and Commission the following:</b>				
9.06	Earthing of LV Sub-board in accordance with KP&L company requirements, IEE regulations, the government Electrical Installations regulations and other statutory requirements comprising but not limited to the following				
	a) 25mm X 3mm pure copper tape as Furse	20	LM		
	b) 1500mm X 15mm pure copper electrode	1	No.		
	c) Tape to earth rod clamp as Furse	1	No.		
	d) Pre-cast concrete inspection pit	1	No.		
	e) 600mm x 600mm x 3mm Copper Lattice mat	1	No.		
	<b>POWER CONNECTION</b>				
9.07	Allow for Liaison and Attendance to Kenya Power for new supply connection of power to the Library.	1	Item		
<b>TOTAL CARRIED FORWARD TO SUMMARY PAGE</b>					

**SUMMARY PAGE**

Item	Description	Amount (Ksh)
1.00	BILL NO.1: SUB-CONTRACT PRELIMINARIES	
2.00	BILL NO. 2-SCHEDULE NO. 2: GROUND FLOOR ELECTRICAL WORKS	
3.00	BILL NO. 2-SCHEDULE NO. 3: FIRST FLOOR ELECTRICAL WORKS	
4.00	BILL NO. 2-SCHEDULE NO. 4: SECOND FLOOR ELECTRICAL WORKS	
5.00	BILL NO. 2-SCHEDULE NO. 5: THIRD FLOOR ELECTRICAL WORKS	
6.00	BILL NO. 2-SCHEDULE NO. 6: FOURTH FLOOR ELECTRICAL WORKS	
7.00	BILL NO. 2-SCHEDULE NO. 8: POWER HOUSE ELECTRICAL WORKS	
8.00	BILL NO. 2-SCHEDULE NO. 9: POWER SUPPLY AND DISTRIBUTION	
9.00	ALLOW PROVISIONAL SUM OF KSH 8,000,000.00 FOR NEW POWER CONNECTION.	8,000,000
10.00	ALLOW CONTINGENCY SUM OF KSH. 1,000,000	1,000,000
<b>GRAND TOTAL C/F TO MAIN SUMMARY (VAT INCLUSIVE)</b>		

**TOTAL AMOUNT IN WORDS**

.....  
 .....  
 .....

**TENDERER'S NAME & STAMP( DOMESTIC SUB CONTRACTOR)**

.....  
 .....

**SIGNATURE** ..... **DATE**.....

**P.I.N No.**.....**V.A.T CERTIFICATE No.**.....

**WITNESS**.....

**SIGNATURE OF WITNESS**.....**DATE**.....

**PROPOSED FIT-OUT WORKS AT NEW UNIVERSITY LIBRARY AT MULTIMEDIA UNIVERSITY OF KENYA  
STRUCTURED CABLING & ACCESS CONTROL WORKS  
BILL NO.1: SUB-CONTRACT PRELIMINARIES**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
1	Discrepancies clause - Sub-contractor shall include all work either shown on the Contract Drawings or detailed in the specification. No claim or extra cost shall be considered for works which has been shown on the drawings or in the specification alone.	1	Item		
2	Payments clause - Payment will be made through certificates to the Main Contractor, unless he specifically agrees to forego this right, in which case direct payment can be made to the Domestic Sub- contractor. All payments will be less retention as specified in the Main Contract. No payment will become due until materials are delivered to site.	1	Item		
3	Scope of contract works clause - The sub-contractor shall supply, deliver, unload, hoist, fix, test, commission and hand-over in satisfactory working order the complete installations specified hereinafter and/or as shown on the Contract Drawings attached hereto, including the provision of labour, transport and plant for unloading material and storage, and handling into position and fixing	1	Item		
4	Extent of contractors duties clause - The Sub- contractor shall be responsible for verifying all dimensions relative to his work by actual measurements taken on site. Shall mark accurately on one set of drawings and indicate all alterations and/or modifications carried out to the designed system during the construction period. This information must be made available on site for inspection by the Engineer.	1	Item		
5	Government legislation and regulations clause - Sub- contractor shall allow for providing holidays and transport for work people, and for complying with Legislation, Regulations and Union Agreements. The Sub-contractor must also make himself acquainted with current legislation and any Government regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc.	1	Item		
6	Insurance company fees clause - Attention is drawn to the tenderers to allow for all necessary fees, where known, that may be payable in respect of any fees imposed by Insurance Companies or statutory authorities for testing or inspection.	1	Item		
7	Samples and materials generally clause - The Sub- contractor shall, when required, provide for approval at no extra cost, samples of all materials to be incorporated in the works. Such samples, when approved, shall be retained by the Engineer and shall form the standard for all such materials incorporated.	1	Item		
<b>Sub Total carried to next page</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub-Total B/F from Previous Page</b>				
8	Bills of quantities clause - All the Quantities are based on the Contract Drawings and are provisional and they shall not be held to gauge or to limit the amount or description of the work to be executed by the Sub- contractor but the value thereof shall be deducted from the Sub-contract Sum and the value of the work ordered by the Engineer and executed there under shall be measured and valued by the Engineer in accordance with the contract. All work liable to adjustment under this Sub-contract shall be left uncovered for a reasonable time to allow measurements needed for such adjustment to be taken by the Quantity Surveyor or Engineer. Immediately the work is ready for measuring the Sub- contractor shall give notice to the Quantity Surveyor or Engineer to carry out measurements before covering up. If the Sub-contractor shall make default in these respects he shall, if the Architect so directs, uncover the work to enable the necessary measurements to be taken and afterwards reinstate at his own expense.	1	Item		
9	Contractors office in Kenya clause - It shall be the Sub-contractor's responsibility to procure work permits, entry permits, licences, registration, etc., in respect of all expatriate staff. The Sub-contractor shall prepare a substantial proportion of his Working Drawings at his office in Kenya. No reasons for delays in the preparation or submission for approval or otherwise of such drawings or proposals will be accepted on the grounds that the Sub-contractor's Head Office is remote from his office in Nairobi or the site of the Sub- contract Works or otherwise.	1	Item		
10	Identification of plant components clause - Sub-contractor shall supply and fix identification labels to all plant, starters, switches and items of control equipment etc with white traffolyte or equal labels engraved in red lettering denoting its name, function and section controlled.	1	Item		
11	Working drawings clause - Sub-contractor shall prepare such Working Drawings as may be necessary. The Working Drawings shall be complete in such detail not only that the Sub-contract Works can be executed on site but also that the Engineer can approve the Sub-contractor's proposals, detailed designs and intentions in the execution of the Sub- contract Works.	1	Item		
12	Records Drawings (As Installed) and instructions clause - Record Drawings, will be subject to the approval of the Engineer, include approved Working Drawings adjusted as necessary and certified by the Sub-contractor as a correct record of the installation of the Sub-contract Works.	1	Item		
13	Maintenance Manual clause - Upon Practical Completion of the Sub-contract Works, the Sub- contractor shall furnish the Engineer four copies of a Maintenance Manual relating to the installation forming part of all of the Sub-contract Works.	1	Item		
	<b>Sub Total carried to next page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub-Total B/F from Previous Page</b>				
14	Hand over clause - The Sub-contract Works shall be considered complete and the Maintenance and Defects Liability Period shall commence only when the Sub-contract Works and supporting services have been tested, commissioned and operated to the satisfaction of the Engineer and officially approved and accepted by the Employer, provided always that the handing over of the Sub-contract Works shall be coincident with the handing over of the Main Contract Works.	1	Item		
15	Testing and inspection - manufactured plant clause - The Engineer reserves the right to inspect and test or witness of all manufactured plant equipment and materials. The right of the Engineer relating to the inspection, examination and testing of plant during manufacture. Sub-contractor shall give two weeks' notice to the Engineer of his intention to carry out any inspection or tests and the Engineer or his representative shall be entitled to witness such tests and inspections.	1	Item		
16	Testing and inspection - installation clause - Allow for testing each section of the Sub-contract Works installation.	1	Item		
17	Initial Maintenance Clause - The sub-contractor shall make routine maintenance once a month during the liability for the Defects Period and shall carry out all necessary adjustments and repairs, cleaning and oiling of moving parts. A monthly report of the inspection and any works done upon the installation shall be supplied to the Engineer. Shall allow in the sub-contract Sum of the initial maintenance, inspection and break-down service	1	Item		
18	Local and other authorities notice clause - The contractor shall comply with and give all notices required by any Regulations, Act or by Law of any Local Authority or of any Public Service, Company or Authority who have any jurisdiction with regard to the works or with those systems the same are or will be connected and he shall pay and indemnify the Government against any fees or charges legally demandable under any regulation or by-law in respect of the works; provided that the said fees and charges if not expressly included in the contract sum or stated by way of provisional sum shall be added to the contract sum.	1	Item		
19	Temporary Works clause - The contractor shall include for the cost of and make necessary arrangements with the Project Manager for such temporary works.	1	Item		
20	Patent Rights clause - The contractor shall fully indemnify the Government of Kenya; against any action, claim or proceeding relating to infringement of any patent or design rights, and pay any royalties which may be payable in respect of any article or any part thereof, which shall have been supplied by the contractor to the Project Manager.	1	Item		
	<b>Sub Total carried to next page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub-Total B/F from Previous Page</b>				
21	Mobilization and Demobilization clause -No claim will be entertained where the contractor has not made any provision for mobilization and demobilization of labour, plant and equipment in the preliminary bills of quantities.	1	Item		
22	Allow for Taxes, Profit and Attendance for the above Item		%		
23	Contract obligation and employers obligation clause - No claims will be entertained for pre-financing of the project by the sub-contractor, or for loss of profit (expectation loss) in case of premature termination, reduction or increase of works as the sub-contractor shall be deemed to have taken adequate measures in programming his works and expenditure and taken necessary financial precaution while executing the works.	1	Item		
24	Any other preliminaries	1	Item		
<b>Total for Bill No. 1: Sub-Contract Preliminaries C/F to Summary Page</b>					

**BILL NO. 2 -SCHEDULE 1:BASEMENT LEVEL DATA INSTALLATION WORKS**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Supply, Install, Test and commission the following:</b>				
	<b>HORIZONTAL CABLING</b>				
1.01	RJ45 cat 6A UTP Angled Single Data outlets complete with faceplates, Keystone jack and labelling system as described in the particular specifications of this document.	3	No.		
1.02	3m RJ45- RJ45 Cat 6A UTP factory terminated patch cord as described in the particular specifications of this document.	3	No.		
1.03	1m, RJ45- RJ45 cat 6A UTP factory terminated patch cord as described in the particular specifications of this document to be used in cabinet.	6	No.		
1.04	Cat 6A UTP 4-pair screened cable as described in the particular specifications of this document pulled between cabinet at Ground floor and work stations and wifi Access points.	420	Lm.		
	<b>ACTIVE COMPONENTS</b>				
1.05	Wireless Access point , versatile, high-performance wireless solution that supports Wi-Fi 6 (802.11ax) connectivity, as described in the particular specifications of this document.	3	No.		
<b>TOTAL CARRIED FORWARD TO MAIN SUMMARY</b>					

**BILL NO. 2 -SCHEDULE 2: GROUND FLOOR LEVEL DATA INSTALLATION WORKS**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Supply, Install, Test and commission the following:</b>				
	<b>HORIZONTAL CABLING</b>				
2.01	RJ45 cat 6A UTP Angled Single Data outlets complete with faceplates, Keystone jack and labelling system as described in the particular specifications of this document.	39	No.		
2.02	3m RJ45- RJ45 Cat 6A UTP factory terminated patch cord as described in the particular specifications of this document.	23	No.		
2.03	1m, RJ45- RJ45 cat 6A UTP factory terminated patch cord as described in the particular specifications of this document to be used in cabinet.	42	No.		
2.04	Cat 6A UTP 4-pair screened cable as described in the particular specifications of this document pulled between cabinet and work stations and wifi Access points.	2100	Lm.		
	<b>CABINETS</b>				
2.05	18U (600(L)x600(W)x900 (H))mm Ground Mounted cabinet with low noise (low dB) fans and power outlet sockets, as described in particular specifications	1	No.		
2.06	24 port RJ45 cat 6 Data patch panel for UTP termination as described in the particular specifications of this document.	2	No.		
2.07	2U Cable Manager	2	No.		
2.08	Rack mountable 240V, 50Hz 2000VA, Smart-UPS with USB and Serial Port and as described in the particular specifications of this document.	1	No.		
	<b>ACTIVE COMPONENTS</b>				
2.09	48 Port Edge Switch with 48 x 1G Base-T/SFP+ combo + 4 x SFP/1G uplink ports as described in the particular specifications of this document	1	No.		
2.1	Wireless Access point , versatile, high-performance wireless solution that supports Wi-Fi 6 (802.11ax) connectivity, as described in the particular specifications of this document.	3	No.		
	<b>BACKBONE CABLING</b>				
2.11	SFP+ fibre modules as described in the particular specifications of this document.	1	No.		
2.12	8 core multimode fibre optic cable complete with connectors	30	Lm		
2.13	24 Port fibre optic patch panel	1	No.		
2.14	1m LC-LC fibre optic patch cord	1	No.		
	<b>Sub total carried to next page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub total carried from previous page</b>				
	<b>UNDERGROUND DUCT</b>				
2.15	Allow for excavation of 600mm deep trench and laying of a 50mm duct for data running from main server room to the Library server room.	220	LM		
2.16	Establish 450 x 450 x 600mm standard data manholes complete with internal plastering and heavy duty recessed lockable steel cover	8	No.		
<b>TOTAL CARRIED FORWARD TO MAIN SUMMARY</b>					

**BILL NO. 2 -SCHEDULE 3:FIRST FLOOR LEVEL DATA AND ACCESS CONTROL INSTALLATION WORKS**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Supply, Install, Test and commission the following:</b>				
	<b>HORIZONTAL CABLING</b>				
3.01	RJ45 cat 6A UTP Single Data outlets complete with faceplates, Keystone jack and labelling system as described in the particular specifications of this document.	33	No.		
3.02	3m RJ45- RJ45 Cat 6A UTP factory terminated patch cord as described in the particular specifications of this document.	33	No.		
3.03	1m, RJ45- RJ45 cat 6A UTP factory terminated patch cord as described in the particular specifications of this document to be used in cabinet.	36	No.		
3.04	Cat 6A UTP 4-pair screened cable as described in the particular specifications of this document pulled between cabinet and work stations and wifi Access points.	1800	Lm.		
	<b>CABINETS</b>				
3.05	42U Ground Mounted cabinet with low noise (low dB) fans and power outlet sockets, as described in particular specifications	1	No.		
3.06	24 port RJ45 cat 6 Data patch panel for UTP termination as described in the particular specifications of this document.	2	No.		
3.07	2U Cable Manager	4	No.		
3.08	Rack mountable 240V, 50Hz 2000VA, Smart-UPS with USB and Serial Port and as described in the particular specifications of this document.	2	No.		
	<b>ACTIVE COMPONENTS</b>				
3.09	24 Port Aggregation/Core Switch with 20 x 10 Gigabit SFP+, 4 x 10 Gigabit copper ports (combo with 2 x SFP+), 1 x GE management port, EU as described in the particular specifications of this document.	1	No.		
3.1	48 Port Edge Switch with 48 x 1G Base-T/SFP+ combo + 4 x SFP/1G uplink ports as described in the particular specifications of this document.	1	No.		
3.11	Wireless Access point , versatile, high-performance wireless solution that supports Wi-Fi 6 (802.11ax) connectivity, as described in the particular specifications of this document.	3	No.		
	<b>BACKBONE CABLING</b>				
3.12	SFP+ fibre modules as described in the particular specifications of this document.	16	No.		
3.13	8 core multimode fibre optic cable complete with connectors	300	Lm		
3.14	24 Port fibre optic patch panel	1	No.		
3.15	1m LC-LC fibre optic patch cord	16	No.		
	<b>Sub total carried to next page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Sub total carried from previous page</b>				
	<b>ACCESS CONTROL INSTALLATION WORKS</b> <b>Supply, Install, test and Commission the following</b> <b>READERS</b>				
3.16	Multi-Discipline Reader, 125kHz & 13.56MHZ Reader, Wiegand Interface, Second Edition with pigtail as Impro or equal and approved equivalent	1	No.		
3.17	Door Exit switch	1	No.		
3.18	Override Key switch	1	No.		
3.19	Emergency Break Glass	1	No.		
	<b>ELECTOMAGNETIC LOCK</b>				
3.2	An Electromagnetic Lock of 600Kg Force complete with installation accessories, door closure & power supply as described in particular specification or equal and approved equivalent.	1	No.		
	<b>CARDS AND CABLES</b>				
3.21	Proximity Cards with the individual employee's name as specified in Particular Specifications.	5	No.		
3.22	Mylair cable for access control system .	40	lm		
3.23	2x1mm <sup>2</sup> cable for wiring door exit switches and maglock	30	LM.		
3.24	Any other item required 1) 2) 3)	1	Item		
<b>TOTAL CARRIED FORWARD TO MAIN SUMMARY</b>					

**BILL NO. 2 -SCHEDULE 4: SECOND FLOOR LEVEL DATA INSTALLATION WORKS**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
				SHS.	SHS.
	<b>Supply, Install, Test and commission the following:</b>				
	<b>HORIZONTAL CABLING</b>				
4.01	RJ45 cat 6A UTP Single Data outlets complete with faceplates, Keystone jack and labelling system as described in the particular specifications of this document.	30	No.		
4.02	3m RJ45- RJ45 Cat 6A UTP factory terminated patch cord as described in the particular specifications of this document.	30	No.		
4.03	1m, RJ45- RJ45 cat 6A UTP factory terminated patch cord as described in the particular specifications of this document to be used in cabinet.	33	No.		
4.04	Cat 6A UTP 4-pair screened cable as described in the particular specifications of this document pulled between cabinet and work stations and wifi Access points.	1650	Lm.		
	<b>CABINETS</b>				
4.05	18U (600(L)x600(W)x900 (H))mm Ground Mounted cabinet with low noise (low dB) fans and power outlet sockets, as described in particular specifications	1	No.		
4.06	24 port RJ45 cat 6 Data patch panel for UTP termination as described in the particular specifications of this document.	2	No.		
4.07	2U Cable Manager	4	No.		
4.08	Rack mountable 240V, 50Hz 2000VA, Smart-UPS with USB and Serial Port and as described in the particular specifications of this document.	1	No.		
	<b>ACTIVE COMPONENTS</b>				
4.09	48 Port Edge Switch with 48 x 1G Base-T/SFP+ combo + 4 x SFP/1G uplink ports as described in the particular specifications of this document.	1	No.		
4.1	Wireless Access point , versatile, high-performance wireless solution that supports Wi-Fi 6 (802.11ax) connectivity, as described in the particular specifications of this document.	3	No.		
	<b>BACKBONE CABLING</b>				
4.11	SFP fibre modules as described in the particular specifications of this document.	2	No.		
4.12	8 core multimode fibre optic cable complete with connectors	30	Lm		
4.13	24 Port fibre optic patch panel	1	No.		
4.14	1m LC-LC fibre optic patch cord	2	No.		
<b>TOTAL CARRIED FORWARD TO MAIN SUMMARY</b>					

**SUMMARY PAGE**

Item	Description	Amount (Ksh)
1.00	BILL NO.1: SUB-CONTRACT PRELIMINARIES	
2.00	BILL NO. 2 -SCHEDULE 1:BASEMENT LEVEL DATA INSTALLATION WORKS	
3.00	BILL NO. 2 -SCHEDULE 2: GROUND FLOOR DATA INSTALLATION WORKS	
4.00	BILL NO. 2 -SCHEDULE 3: FIRST FLOOR DATA INSTALLATION WORKS	
5.00	BILL NO. 2 -SCHEDULE 4: SECOND FLOOR DATA INSTALLATION WORKS	
6.00	ALLOW A CONTIGENCY SUM OF KSH. 500,000	500,000
<b>GRAND TOTAL C/F TO FORM OF TENDER (VAT INCLUSIVE)</b>		

**TOTAL AMOUNT IN WORDS**

.....  
 .....  
 .....

**TENDERER'S NAME & STAMP**

.....  
 .....  
 .....

**SIGNATURE .....**      **DATE.....**

**P.I.N No.....V.A.T CERTIFICATE No.....**

**WITNESS.....**

**SIGNATURE OF WITNESS.....DATE.....**

## **GRAND SUMMARY**

## GRAND SUMMARY

ITEM	DESCRIPTION	PAGE NO.	FOR TENDERER USE ONLY	FOR OFFICIAL USE ONLY
			KSHS.	KSHS.
	<b><u>GRAND SUMMARY</u></b>			
1	ELECTRICAL INSTALLATION WORKS	EW/31		
2	STRUCTURED CABLING WORKS	SC /11		
<b>GRAND TOTAL CARRIED TO FORM OF TENDER ( INCLUSIVE OF ALL THE APPLICABLE TAXES AND LEVIES)</b>				

AMOUNT:IN WORDS:.....

SIGNED:  
( TENDERER'S NAME ) .....

Address: .....

Tel No: .....

Date: .....

SIGNED:  
( WITNESS'S NAME ) .....

Address: .....

Tel No: .....

Date: .....