

APPENDIX TO ADDENDUM

**PART II: WORK REQUIREMENTS**

**SECTION V**

**SUB-SECTION: BILL OF QUANTITIES**

**BILL No. 1: PLERIMINARY ITEMS**

<b>ITEM No.</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1.	<p>The Contractor shall provide, or erect and maintain an approved lock-up office for the sole use and his own site staff. The office, which will have a total floor area of not less than -----square metres, will be divided into two separate interconnected offices. Services to be provided shall include a telephone, water sanitary and electrical supply and drainage. The offices shall be supplied with furniture and equipment that shall include:</p> <p>4 No. desks with chairs; 1 No. large table with sufficient number of chairs; drawing table along the full length of one side with plan drawers and drawing stools; 4 No. waste paper baskets; sufficient number of pin boards; and any additional furniture and fittings as may reasonably be required during the Contract period. The Contractor shall provide the Architect and site staff with computer sets or laptops, printers and telephones all that are necessary for project use.</p> <p>The office furniture and equipment shall all be to the approval of the Engineer. The Contractor shall also provide all labor, equipment and consumable stores equipment throughout the currency of the contract.</p>	NOT APPLICABLE
2	[OPTIONAL] Contractor shall provide a house for Engineers site agent, which shall be one bedroomed temporary house with a sitting room, toilet, bathroom and a kitchen complete with electrical and sanitary installations and provide maintenance and paying of bills of water and electricity up to and including end of the contract period.	NOT APPLICABLE
3	Provide a signboard not less than _____ square meters in size of a design type, and with lettering and coloring and in a position approved by the Engineer. The signboard shall be for the display of the Main Contractor's name and the names of all his Sub-Contractors, with the Procuring Entity's name painted thereon. All Consultants names be printed in letters not exceeding 50 mm high. No other signboard or advertising shall be allowed. The signboard shall be fully maintained during the Contract Period and shall be pulled down and removed at the end of the contract.	NOT APPLICABLE
4	INCLUDE ANY OTHER PLERIMINARY ITEM(S) IF APPLICABLE AND NECESSARY TO YOUR ORGANIZATION	
5		
6		
<b>TOTAL CARRIED TO GRAND SUMMARY</b>		

**BILL No. 2: WORK ITEMS**

The totals of **Table A AND Table B** shall form the total for Bill No.2 (**TABLE C**) whose total shall be transferred to the Form of Tender.

**TABLE A**

<b>WORK ITEMS FOR THE IMPELEMENTATION OF THE PROJECT</b>						
<b>S/No.</b>	<b>Materials/E quipment</b>	<b>Specifications</b>	<b>Units</b>	<b>Qty</b>	<b>Cost</b>	<b>Amount</b>
1.	CCTV Dome Camera	H.265/H.265+; Indoor/Outdoor; 2 MP; Network Dome w/PoE; Support On-Board Storage; 30m Range Day/Night Full Color Vision; Smart Feature-set	Pcs	78		
2.	CCTV Bullet Camera	H.265/H.265+; Indoor/Outdoor; 4 MP; Network Bullets w/PoE; Support On-Board Storage; 30m Range Day/Night Full Color Vision; Smart Feature-set	Pcs	102		
3.	PTZ (Pan Tilt Zoom)	PTZ Network 7-inch 2 MP 25X Powered by DarkFighter IR Network Speed Dome 1/1.8" progressive scan CMOS High quality imaging with 2 MP resolution Excellent low-light performance with powered-by-DarkFighter technology Audio visual alarm: The white flashing light and audible warning can be triggered by certain events 25× optical zoom and 16× digital zoom provide close up views over expansive areas Expansive night view with up to 200 m IR distance Focuses on human and vehicle targets classification based on deep learning Face capture: Up to 5 faces captured at the same time	Pcs	3		
4.	Network Switch	16Port PoE with Fibre Port	Pcs	15		
5.	Network Cable	Cat 6e UTP (Outdoor)	Box	18		
6.	Power Beams (Ubiquity)	PBE-M5-400 Dimensions 420 x 420 x 275 mm (16.54 x 16.54 x 10.83") Weight (Mount Included) 1.753 kg (4.789 lb) Gain 25 dBi	Pcs	6		

		Networking Interface (1) 10/100/1000 Ethernet Port Enclosure Outdoor UV Stabilized Plastic Max. Power Consumption 8W Max. TX Power 26 dBm Power Supply 24V, 0.5A Gigabit PoE Adapter (Included) Power Method Passive PoE (Pairs 4, 5+; 7, 8 Return) Wind Survivability 200 km/h (125 mph) Wind Loading 342.5 N @ 200 km/h (77 lbf @ 125 mph) Mounting Pole Mounting Kit Included Salt Fog Test IEC 68-2-11 (ASTM B117), Equivalent: MIL-STD-810 G Method 509.5 Vibration Test IEC 68-2-6				
7.	NVR(NETWORK VIDEO RECORDER )	64ch NVR 2U 4K, 12MP HD LIVE VIEW, 8 HDD MAX, ; RAID Support 2HDMI(DIFFERENT SOURCE) AND 2 VGA (DIFFERENT SOURCE) Advanced streaming conditions  Inclusive Android and windows management software Wireless mouse	Pcs	3		
8.	CABINET 9u	9u cabinet for CCTV switches	Pc	15		
9.	CABINET 42U	Cabinet 42U 800 X1000 FOR SERVER ROOM	Pcs	1		
10.	Trunkings	Double Trunking	Pcs	50		
11.	Trunkings	MetalicTrunking 2x3	Pcs	5		
12.	Pipings	PVC 50mm	Pcs	100		
13.	UPS	APC 1.5KVA	Pcs	15		
14.	UPS	APC ONLINE BACKUP UPS 3KVA	Pcs	1		
15.	DISPLAY Monitor	75" MONITOR DISPLAY QLED/OLED TECHNOLOGY,SUPPORTS UPTO 8K VIDEOS.	Pcs	3		
16.	Data Storage Disks	10TBsurveillance Disk for Surveillance systems	Pcs	6		

**OTHER ASSOCIATED COSTS**

17	Miscellaneous Costs	Lot			
18	Labour and commissioning with 1 year service warranty	Lot			
	<b>Total</b>				

**TABLE B  
BIOMETRIC GATE CONTROL SYSTEMS**

NO	ITEM	SPECIFICATION	QTY	UNITPRICE	TOTALCOST
1	Single FullHeightTurnstile (Triumph)	<b>220 Volt AC (110 Volt AC on request) 50Hz / 60Hz 50W (single turnstile) - fail-secure mode 24 Volt DC (12 Volt DC on request) 24 Volt DC Single turnstile: • 1 400mm wide x 2 125mm high – recommended minimum opening size 1 200mm – recommended minimum opening 3 arm (120°)   4 arm (90°)   4 arm (72°) - ultra secure 32mm diameter U-tube arms spaced 165mm apart Single turnstile (4 arm): 160kg • Integrates with all access control and time &amp; attendance systems • Unlocking for entry / exit rotation controlled through normally open dry contact • Transaction / rotation complete output • Integral wireways with draw wires in place - no exposed wires</b>	2		
	Biometric Device	<b>RF OPTION : 13.56Mhz MIFARE PLUS MOBILE CARD : NFC Supported INGRESS PROTECTION: IP65 EXTRACTOR: MINEX Certified and compliant MAX USER: 500,000 MAX TEXT LOG: 3,000,000 CPU: 1.0 GHz Single Core MEMORY: 8GB Flash + 256 MB Ram CRYPTO CHIP: Supported LCD TYPE: 2.8” Color TFT LCD LED: MULTIPLE COLORS SOUND: 16-bit WIFI: Built-in, IEEE802.11/b/g4 TAMPER: Supported ETHERNET: 10/100 Mbps, auto MDIX RELAY: 1 Relay USB: USB 2.0 (Host) INTERCOM: Supported POE: IEEE 802.3af compliant POWER: : DC 12V Should be able to integrate with the current student management system</b>	2		
<b>TOTAL</b>					

**Bill No. 7: Provisional Sums**

<i>Bill no.</i>	<i>Item no.</i>	<i>Description</i>	<i>Amount</i>
1			
2			
3			
4			
etc.			
Total for Specified Provisional Sums (carried forward to Grand Summary)			

**SCOPE OF CCTV PROJECT (INSTALLATION AREAS)**

#	Area Description	Inside Bldg	Outside Bldg	Total
1.	Deans office	2	4	6
2.	Hospitality: Kitchen 1 (Small)	1		1
3.	Hospitality: Kitchen 1 (Big)	2		2
4.	Hospitality: Kitchen Outside		4	4
5.	Procurement Entrance		1	1
6.	Procurement Inside	2	2	4
7.	Main Kitchen	4	4	8
8.	Dining Hall	1	1	2
9.	Car park: Admin	1	1(PTZ)	2
10.	Admin Block Corridor/Behind	2		2
11.	Admin Block Corridor/Front	1	2	3
12.	Boardroom	1		1
13.	Principal's office: Reception	1		1
14.	Principal's office: Office & BoardRm	0		0
15.	Dep. Principals' office: Reception	1		1
16.	Finance office: Reception/Photocopy	0		0
17.	Finance office: Expenditure	1		1
18.	Admin BoardRm Inner Entrance	2		2
19.	Bus Park	2	2	4
20.	Water Tank	0	3	3
21.	Library Bldg	10	4	14
22.	Business Centre	4	7	11
23.	Huduma Centre	8		8
24.	Computer Lab 1	4	0	4
25.	Computer Lab 2	1	0	1
26.	Computer Lab 3	1	0	1

27.	Computer Lab 4	1	0	1
28.	Computer Lab 5	1	1	2
29.	Computer Lab 6	1	0	1
30.	Computer Lab 7	1	0	1
31.	IT block	2	3	5
32.	Main gate	3	1(PTZ)	4
33.	Farm Stores	1	1	2
34.	Farm Manager	0	1	1
35.	Dispensary	1	3	4
36.	Students Forum		1 (PTZ)	1
37.	Building and Civil Eng. New	14	4	18
38.	Building and Civil Engineering Old	7	0	7
39.	Electrical Workshop New	6	2	8
40.	Electrical Workshop Old	2	1	3
41.	Mechanical Workshop New Building	10	4	14
42.	Senior Mechanical Workshop	5	3	8
43.	Junior Mechanical Workshop	2	3	5
44.	Materials Store	2	0	2
45.	Mechanical Workshop Shade	0	2	2
46.	MAAS	7	0	7
	<b>Total</b>			<b>183</b>

**TABLE C: GRAND SUMMARY**

<b>SUMMARY ITEMS</b>	<b>Amount</b>
Bill No. 1: Preliminary Items	
Bill No. 2: Work Items (Table A & B).	
Bill No. 3: Day Works Summary	Not Applicable
Bill No. 4: Day Work Rates – Materials	Not Applicable
Bill No. 5: Day Works Rates – Contractor’s Equipment	Not Applicable
Bill No. 6: Day Work Summary	Not Applicable
Bill No. 7: Provisional Sums	
Subtotal of Bills No 1-7	
Allow for any Discounts	
<b>TOTAL TENDER PRICE Carried forward to Form of Tender</b>	