

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>SECTION NO. 19</u></b>  <b><u>BILL NO. 1</u></b>  <b><u>ELECTRICAL INSTALLATION</u></b>  <b><u>Complete installation, reticulation, electrical, telephone, intercom and bell system</u></b>  <b><u>NOTE: Tenderers are advised to study the specification before pricing the bill. Only conduit and draw wires for intercom systems must be provided</u></b>  <b><u>Wall Mounted Meter Box</u></b>					
1	Refurbish the existing kiosk, including doors, inside panel, labelling and new switchgear measured below.	No	1			
	<b><u>Equipment provided in metering kiosk.</u></b>					
	<b><u>Moulded case circuit breakers</u></b>					
2	60 Ampere SP. 5kA	No	8			
3	60 Ampere TP. 5kA	No	4			
	<b><u>Moulded Case Isolators</u></b>					
4	200 Ampere T.P. 6 kA	No	1			
	<b><u>Lightning Arrestors</u></b>					
5	Domestic S.P. 6 kA	No	1			
	<b><u>Maximum Demand/kWh meter</u></b>					
6	200 Ampere Three Phase (Space only)	No				
	<b><u>Current Transformers</u></b>					
7	100 : 5 (Space only)	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Locks</u></b>					
8	Padlocks as specified	No	1			
	<b><u>Engineer to confirm items below during prelim design stage as per Annexure B of his Letter of Appointment</u></b>					
9	Connection fee		Item			
10	Bulk contribution (if applicable)		Item			
11	Boundary contribution costs (if applicable)		Item			
12	Deposit payable to Supply Authority		Item			
13	Attendance, profit and incidental costs for contractor in terms of the above items 9 to 12	No				
	<b><u>Upgraded Admin Block DB</u></b>					
	Supply and install surface mounted distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.					
14	Material and labour excluding the items listed hereunder	No	1			
	<b><u>Equipment provided in Distribution Board</u></b>					
	<b><u>Moulded Case Circuit Breakers</u></b>					
15	10 Ampere S.P. 6 kA	No	4			
16	20 Ampere S.P. 6 kA	No	6			
17	10 Ampere T.P. 5kA	No	4			
18	60 Ampere T.P. 6 kA	No	4			
19	50 Ampere S.P. 6 kA	No				
20	80 Ampere T.P. 6 kA	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Earth Leakage Units</u></b>					
21	60 Ampere single phase 6 kA 30 mA	No	2			
	<b><u>Moulded Case Isolators</u></b>					
22	60 Ampere T.P. 6 kA	No				
23	200 Ampere T.P. 6 kA	No				
	<b><u>Lightning Arrestors</u></b>					
24	Domestic S.P. 6 kA	No	1			
	<b><u>Contactors</u></b>					
25	13A 3-Pole	No				
	<b><u>Labels</u></b>					
26	Danger sign and labels as specified (each DB's)	No	11			
	<b><u>New Grade R Classroom (2 x Classrooms) DB</u></b>					
	<b><u>Supply and install surface mounted distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.</u></b>					
27	Material and labour excluding the items listed hereunder	No	1			
	<b><u>Equipment provided in Distribution Board</u></b>					
	<b><u>Moulded Case Circuit Breakers</u></b>					
28	10 Ampere S.P. 6 kA	No	2			
29	20 Ampere S.P. 6 kA	No	2			
30	60 Ampere T.P. 6 kA	No	1			
	<b><u>Earth Leakage Units</u></b>					
31	60 Ampere Single Phase 6 kA 30mA	No	1			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Moulded Case Isolators</u></b>					
32	60 Ampere T.P. 6 kA	No				
	<b><u>Contactors</u></b>					
33	32 Ampere T.P.	No				
	<b><u>Lightning Arrestors</u></b>					
34	Domestic S.P. 6 kA	No	1			
	<b><u>Contactors</u></b>					
35	13A 3-Pole	No	1			
	<b><u>Labels</u></b>					
36	Danger sign and labels as specified (each DB's)	No	5			
	<b><u>Existing Block 1 (4 x Classrooms) DB</u></b>					
	Supply and install flush mounted distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.					
37	Material and labour excluding the items listed hereunder	No	1			
	<b><u>Equipment provided in Distribution Board</u></b>					
	<b><u>Moulded Case Circuit Breakers</u></b>					
38	10 Ampere S.P. 6 kA	No	2			
39	20 Ampere S.P. 6 kA	No	3			
	<b><u>Earth Leakage Units</u></b>					
40	60 Ampere Single Phase 6 kA 30mA	No	1			
	<b><u>Moulded Case Isolators</u></b>					
41	60 Ampere S.P. 6 kA	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Lightning Arrestors</u></b>					
42	Domestic S.P. 6 kA	No	1			
	<b><u>Contactors</u></b>					
43	13A 3-Pole	No	1			
	<b><u>Labels</u></b>					
44	Danger sign and labels as specified (each DB's)	No	5			
	<b><u>New Nutrition Centre DB</u></b>					
	Supply and install flush mounted distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.					
45	Material and labour excluding the items listed hereunder	No	1			
	<b><u>Equipment provided in Distribution Board</u></b>					
	<b><u>Moulded Case Circuit Breakers</u></b>					
46	10 Ampere S.P. 6 kA	No	5			
47	20 Ampere S.P. 6 kA	No	3			
	<b><u>Earth Leakage Units</u></b>					
48	60 Ampere single phase 6 kA 30 mA	No	1			
	<b><u>Moulded Case Isolators</u></b>					
49	60 Amp S.P. 6 kA	No				
50	20 Ampere D.P. 6 kA	No	2			
51	60 Ampere T.P. 6 kA	No				
	<b><u>Lightning Arrestors</u></b>					
52	Domestic S.P. 6 kA	No	1			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Contractors</u></b>					
53	13A 3-Pole	No	1			
	<b><u>Labels</u></b>					
54	Danger sign and labels as specified (each DB's)	No	5			
	<b><u>Existing Block 2 (4 x Classroom) DB</u></b>					
	Refurbish the existing Distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.					
55	Material and labour excluding the items listed hereunder	No	1			
	<b><u>Equipment provided in Distribution Board</u></b>					
	<b><u>Moulded Case Circuit Breakers</u></b>					
56	10 Ampere S.P. 6 kA	No	2			
57	20 Ampere S.P. 6 kA	No	2			
	<b><u>Earth Leakage Units</u></b>					
58	60 Ampere single phase 6 kA 30 mA	No	1			
	<b><u>Moulded Case Isolators</u></b>					
59	60 Ampere S.P. 6 kA	No				
	<b><u>Lightning Arrestors</u></b>					
60	Domestic S.P. 6 kA	No	1			
	<b><u>Contractors</u></b>					
61	13A 3-Pole	No	1			
	<b><u>Labels</u></b>					
62	Danger sign and labels as specified (each DB's)	No	5			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Existing Block 3 (4 x Classroom) DB</u></b>					
	Refurbish the existing Distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.					
63	Material and labour excluding the items listed hereunder	No	1			
	<b><u>Equipment provided in Distribution Board</u></b>					
	<b><u>Moulded Case Circuit Breakers</u></b>					
64	10 Ampere S.P. 6 kA	No	2			
65	20 Ampere S.P. 6 kA	No	2			
	<b><u>Earth Leakage Units</u></b>					
66	60 Ampere single phase 6 kA 30 mA	No	1			
	<b><u>Moulded Case Isolators</u></b>					
67	60 Ampere T.P. 6 kA	No				
	<b><u>Lightning Arrestors</u></b>					
68	Domestic S.P. 6 kA	No	1			
	<b><u>Contactors</u></b>					
69	13A 3-Pole	No	1			
	<b><u>Labels</u></b>					
70	Danger sign and labels as specified (each DB's)	No	5			
	<b><u>Existing Block 4 (4 x Classroom) DB</u></b>					
	Refurbish the existing Distribution board Supply and install flush mounted distribution board complete with doors, frames, sub- frames, chassis, fixtures, fittings, terminations, busbars and wiring with spare space as per specification as well as security detail.					
71	Material and labour excluding the items listed hereunder	No	1			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

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Item No	Description	Unit	Quantity	Rate	Amount	
82	20 Ampere S.P. 6 kA  <b><u>Earth Leakage Unit</u></b>	No	6			
83	60 Ampere Single Phase 6 kA 30mA  <b><u>Moulded Case Isolators</u></b>	No	3			
84	60 Ampere D.P. 6 kA	No				
85	60 Ampere D.P. 6 kA  <b><u>Lightning Arrestors</u></b>	No				
86	Domestic S.P. 6 kA  <b><u>Contactors</u></b>	No	1			
87	13A 3-Pole  <b><u>Labels</u></b>	No	1			
88	Danger sign and labels as specified (each DB's)  <b><u>AREA LIGHTS</u></b>  <b><u>Installed and mounted on poles, including poles, excavation to install poles, lamps, 5A circuit breaker and 2 x 2.5mm² PVC conductors from circuit breaker to luminaire on top of pole.</u></b>  <b><u>Type S</u></b>  <b><u>100W HPS lamp streetlight fitting on 3.6m</u></b>	No	5			
89	(3.0m m/h) pole.	No	15			
Carried to Collection					R	
Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation						

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Low Voltage Cables</u></b>					
	<b><u>600/1000V grade PVC/PVC/SWA/PVC stranded copper conductor cable (terminations and earth conductors elsewhere measured)</u></b>					
	<b><u>Cable laid in trenching (excavations elsewhere measured)</u></b>					
90	2,5mm <sup>2</sup> x 3-core	m				
91	4mm <sup>2</sup> x 4-core	m	600			
92	6mm <sup>2</sup> x 4-core	m				
93	6mm <sup>2</sup> x 3-core	m				
94	10mm <sup>2</sup> x 3-core	m	300			
95	10mm <sup>2</sup> x 4-core	m				
96	16mm <sup>2</sup> x 3-core	m	200			
97	16mm <sup>2</sup> x 4-core	m	100			
98	25mm <sup>2</sup> x 4-core	m	50			
99	35mm <sup>2</sup> x 4-core	m				
100	70mm <sup>2</sup> x 4-core	m				
	<b><u>Cable Terminations complete including glands, shrouds, lugs, connections and commissioning</u></b>					
101	2,5mm <sup>2</sup> x 3-core	No				
102	4mm <sup>2</sup> x 4-core	No	100			
103	6mm <sup>2</sup> x 4-core	No				
104	6mm <sup>2</sup> x 3-core	No				
105	10mm <sup>2</sup> x 3-core	No	12			
106	10mm <sup>2</sup> x 4-core	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
107	16mm <sup>2</sup> x 3-core	No	4			
108	16mm <sup>2</sup> x 4-core	No	2			
109	25mm <sup>2</sup> x 4-core	No	2			
110	35mm <sup>2</sup> x 4-core	No				
111	70mm <sup>2</sup> x 4-core	No	2			
	<b><u>Bare Stranded Copper Earth Wire strapped to Cables (terminations elsewhere measured)</u></b>					
112	2.5mm <sup>2</sup> (Insulated)	m	600			
113	4mm <sup>2</sup> BCEW	m				
114	6mm <sup>2</sup> BCEW	m				
115	10mm <sup>2</sup> BCEW	m	100			
116	16mm <sup>2</sup> BCEW	m	50			
117	25mm <sup>2</sup> BCEW	m				
118	35mm <sup>2</sup> BCEW	m				
	<b><u>Bare Stranded Copper Earth Wire</u></b>					
	<b><u>Terminations complete including drilling, bolting, lugs, connections and commissioning</u></b>					
119	2.5mm <sup>2</sup> (Insulated)	No	30			
120	4mm <sup>2</sup> BCEW	No				
121	6mm <sup>2</sup> x BCEW	No				
122	10mm <sup>2</sup> BCEW	No	2			
123	16mm <sup>2</sup> BCEW	No	2			
124	25mm <sup>2</sup> BCEW	No				
125	35mm <sup>2</sup> BCEW	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>EXCAVATIONS</u></b>					
	<b><u>All excavations, back filling and compaction</u></b>					
	<b><u>Excavate for cable and sleeve trench including temporary support of sides, keeping excavations dry, backfilling and compacting to the Engineer's specification</u></b>					
126	Pickable Soil	m3	600			
127	For Soft Rock	m3	70			
128	For Hard Rock	m3	70			
	<b><u>Bedding under and filling around cables</u></b>					
129	comprising sifted sand	m3	50			
	<b><u>CABLE MARKERS</u></b>					
130	PVC warning marking tape	m	1 000			
131	Concrete route markers	No				
	<b><u>MANHOLES</u></b>					
132	600 x 600 x 800 mm	No	7			
	<b><u>SLEEVES</u></b>					
133	110mm dia	m	50			
134	75mm dia	m				
135	50mm dia	m	150			
136	32mm dia	m	100			
	<b><u>DRAW WIRE</u></b>					
137	Galvanised 1,6mm dia. draw wire	m	1 000			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Item No	Description	Unit	Quantity	Rate	Amount	
138	<u>Wall boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u> Draw box with tamper proof cover  <b><u>BELLS AND SMALL POWER</u></b>  <u>Conduit and accessories as specified in Part 2</u>  <u>Conduit placed in position for casting into concrete or screed, for building or chased into concrete brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles</u>	No				
139	20mm	m	350			
140	32mm	m	750			
141	<u>Round conduit box as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork or surface mounted including locknuts and bushes</u> 60mm deep	No	5			
142	<u>Wall boxes as specified in part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u> 100 x 50 x 50mm	No	5			
143	300 x 300 x 75mm including door as specified	No	2			
144	<u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs</u> 100 x 100mm  <b><u>CONDUCTORS</u></b>	No	5			
Carried to Collection					R	
Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation						

Item No	Description	Unit	Quantity	Rate	Amount	
145	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b> 2,5mm <sup>2</sup>	m	1 100			
146	<b><u>Bare stranded copper earth conductors drawn into Conduits</u></b> 2,5mm <sup>2</sup>	m	600			
	<b><u>APPLIANCES</u></b>  <b><u>Appliances complete with cover plates fixed in flush boxes (boxes elsewhere measured)</u></b>  <b><u>Bell Switch</u></b>					
147	16 Ampere 250V grade	No	1			
148	16 Ampere 250V Photocell	No	2			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

Section No. 19  Bill No. 1  Electrical Installation  <b><u>COLLECTION</u></b>  Total Brought Forward from Page No.					
Carried Forward to Summary of Section No. 19  Section No. 19 ELECTRICAL INSTALLATION Bill No. 1 Electrical Installation					

16.



Item No	Description	Unit	Quantity	Rate	Amount	
6	100 x 100mm	No	26			
7	Isolator	No	3			
	<b><u>Blank Covers</u></b>					
8	100mm dia	No	4			
	<b><u>Conductors</u></b>					
	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b>					
9	2,5mm <sup>2</sup>	m	600			
10	4,0mm <sup>2</sup>	m	700			
11	6,0mm <sup>2</sup>	m	50			
	<b><u>Bare stranded copper earth conductors drawn into conduits</u></b>					
12	2,5mm <sup>2</sup>	m	1 300			
13	4,0mm <sup>2</sup>	m	5			
	<b><u>Appliances</u></b>					
	Complete with cover plate fixed in flush boxes (boxes elsewhere measured)					
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
14	Switched socket outlet	No	26			
	<b><u>Light Switches</u></b>					
15	16 Ampere 250V grade single lever one way	No	12			
16	16 Ampere 250V grade single lever two way	No	2			
17	16 Ampere 250V grade two lever 1 way	No	3			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 2 Admin Block, Internal Electrical Installation					

18.

19.

20.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>APPLIANCES</u></b>					
	<b><u>Surface mounted appliance complete</u></b>					
7	16 Ampere photo cell in an empty luminaire	No	1			
	<b><u>SLEEVES</u></b>					
8	100mm dia	m				
9	50mm dia	m				
	<b><u>LUMINAIRES</u></b>					
	<b><u>Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps, see Part 2</u></b>					
	<b><u>Type A</u></b>					
10	2 - lamp 58W fluorescent luminaire see Part 2	No	26			
	<b><u>Type B</u></b>					
11	1 - lamp 58W fluorescent luminaire see Part 2	No	2			
	<b><u>Type C</u></b>					
	<b><u>Bulkhead luminaire with polycarbonate lens</u></b>					
12	Part 2	No	22			
	<b><u>Type L</u></b>					
13	2 – Lamp 58W fluorescent luminaire see Part 2	No				
	<b><u>Type M</u></b>					
14	As C with red lens	No	1			
	<b><u>TELEPHONE DISTRIBUTION BOARD</u></b>					
15	Flush mounted telephone distribution board size 450 x 450 x 180mm flush mounted complete with doors, frames, sub-frames, fixtures and 20mm thick soft board	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 3 Admin Block, Luminaires and Wireways for Telephone an					

Item No	Description	Unit	Quantity	Rate	Amount	
16	<div>TESTING AND COMMISSIONING</div> <div>Test and commission of the complete electrical installation</div>		Item			
	Carried to Collection			R		
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 3 Admin Block, Luminaires and Wireways for Telephone an					

23.

24.



Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Blank Covers</u></b>					
5	100mm dia	No				
6	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
7	300 x 300mm	No				
	<b><u>CONDUCTORS</u></b>					
	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b>					
8	2,5mm <sup>2</sup>	m	400			
9	4,0mm <sup>2</sup>	m	400			
10	6,0mm <sup>2</sup>	m				
	<b><u>Bare stranded copper earth conductors drawn into conduits</u></b>					
11	2,5mm <sup>2</sup>	m	400			
12	4,0mm <sup>2</sup>	m				
	<b><u>APPLIANCES</u></b>					
	<b><u>Complete with cover plate fixed in flush boxes (boxes elsewhere measured)</u></b>					
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
13	Switched socket outlet	No	2			
	<b><u>Light Switches</u></b>					
14	16 Ampere 250V grade single lever one way	No	4			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 4 New Grade R, Internal Electrical Installation					

R

27.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>SECTION NO. 19</u></b>  <b><u>BILL NO. 5</u></b>  <b><u>New Grade R LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM</u></b>  <b><u>(Complete installation : wireways for telephone and intercom system)</u></b>  <b><u>WIREWAYS AND LUMINAIRES</u></b>  <b><u>Conduit &amp; accessories as specified in Part 2</u></b>  <b><u>Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles</u></b>					
1	25mm  <b><u>Wall boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u></b>  <b><u>Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes</u></b>	m				
2	100 x 100mm	No				
3	300 x 300 x 75mm including door as specified	No				
	<b><u>Blank Covers</u></b>					
4	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
5	100 x 100mm	No				
	<b>Carried to Collection</b>			R		
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 5 New Grade R, Luminaires and Wireways for Telephone a					

Item No	Description	Unit	Quantity	Rate	Amount	
6	<b><u>DRAW WIRE</u></b> Galvanised 1,6mm draw wire	m				
7	<b><u>APPLIANCES</u></b> <b><u>Surface mounted appliance complete</u></b> 16 Ampere photo cell in an empty luminaire	No	1			
8	<b><u>SLEEVES</u></b> 50mm dia	m				
9	32mm dia	m				
10	<b><u>LUMINAIRES</u></b> <b><u>Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps</u></b> <b><u>Type A</u></b> 2 - lamp 58W fluorescent luminaire see Part 2	No	10			
11	<b><u>Type B</u></b> 1 - lamp 58W fluorescent luminaire see Part 2	No				
12	<b><u>Type C</u></b> <b><u>Bulkhead luminaire with polycarbonate lens see</u></b> Part 2	No	26			
13	<b><u>Type D</u></b> <b><u>Bulkhead luminaire with polycarbonate lens see</u></b> Part 2	No				
14	<b><u>TESTING AND COMMISSIONING</u></b> Test and commission of the complete electrical installation		Item			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 5 New Grade R, Luminaires and Wireways for Telephone a					

30.

31.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Blank Covers</u></b>					
5	100mm dia	No				
6	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
7	300 x 300mm	No				
	<b><u>CONDUCTORS</u></b>					
	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b>					
8	2,5mm <sup>2</sup>	m	2 400			
9	4,0mm <sup>2</sup>	m	1 600			
10	6,0mm <sup>2</sup>	m				
	<b><u>Bare stranded copper earth conductors drawn into conduits</u></b>					
11	2,5mm <sup>2</sup>	m	2 000			
12	4,0mm <sup>2</sup>	m				
	<b><u>APPLIANCES</u></b>					
	<b><u>Complete with cover plate fixed in flush boxes (boxes elsewhere measured)</u></b>					
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
13	Switched socket outlet	No	8			
	<b><u>Light Switches</u></b>					
14	16 Ampere 250V grade single lever one way	No	8			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 6 Existing Block 1 & 2, Internal Electrical Installation					



33.

34.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>SECTION NO. 19</u></b>  <b><u>BILL NO. 7</u></b>  <b><u>Existing Block 1 &amp; 2 LUMINAIRES AND WIREWAYS</u></b>  <b><u>(Complete installation : wireways for telephone and intercom system)</u></b>  <b><u>WIREWAYS AND LUMINAIRES</u></b>  <b><u>Conduit &amp; accessories as specified in Part 2 Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles</u></b>					
1	25mm  <b><u>Wall boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u></b>  <b><u>Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes</u></b>	m				
2	100 x 100mm	No				
3	300 x 300 x 75mm including door as specified	No				
	<b><u>Blank Covers</u></b>					
4	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
5	100 x 100mm	No	2			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 7 Existing Block 1 & 2, Luminaires and Wireways for Teleph					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>DRAW WIRE</u></b>					
6	Galvanised 1,6mm draw wire	m	800			
	<b><u>APPLIANCES</u></b>					
	<b><u>Surface mounted appliance complete</u></b>					
7	16 Ampere photo cell in an empty luminaire	No	2			
8	32mm dia	m				
	<b><u>LUMINAIRES</u></b>					
	<b><u>Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps, see Part 2</u></b>					
	<b><u>Type A</u></b>					
9	2 - lamp 58W fluorescent luminaire see Part 2	No	32			
	<b><u>Type B</u></b>					
10	1 - lamp 58W fluorescent luminaire see Part 2	No				
	<b><u>Type C</u></b>					
	<b><u>Bulkhead luminaire with polycarbonate lens see</u></b>					
11	Part 2	No	12			
	<b><u>Type L</u></b>					
	<b><u>Bulkhead luminaire with polycarbonate lens see</u></b>					
12	Part 2	No				
	<b><u>TESTING AND COMMISSIONING</u></b>					
13	Test and commission of the complete electrical installation	No	2			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 7 Existing Block 1 & 2, Luminaires and Wireways for Teleph					

37.

38.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Blank Covers</u></b>					
5	100mm dia	No				
6	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
7	300 x 300mm	No				
	<b><u>CONDUCTORS</u></b>					
	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b>					
8	2,5mm <sup>2</sup>	m	1 400			
9	4,0mm <sup>2</sup>	m	800			
10	6,0mm <sup>2</sup>	m				
	<b><u>Bare stranded copper earth conductors drawn into conduits</u></b>					
11	2,5mm <sup>2</sup>	m	1 100			
12	4,0mm <sup>2</sup>	m				
	<b><u>APPLIANCES</u></b>					
	<b><u>Complete with cover plate fixed in flush boxes (boxes elsewhere measured)</u></b>					
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
13	Switched socket outlet	No	6			
	<b><u>Light Switches</u></b>					
14	16 Ampere 250V grade single lever one way	No	3			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 8 New Nutrition Centre, Internal Electrical Installation					

40.



41.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>SECTION NO. 19</u></b>  <b><u>BILL NO. 9</u></b>  <b><u>New Nutrition Centre LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM</u></b>  <b><u>(Complete installation : wireways for telephone and intercom system)</u></b>  <b><u>WIREWAYS AND LUMINAIRES</u></b>  <b><u>Conduit &amp; accessories as specified in Part 2</u></b>  <b><u>Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles</u></b>					
1	25mm  <b><u>Wall boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u></b>  <b><u>Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes</u></b>	m				
2	100 x 100mm	No				
3	300 x 300 x 75mm including door as specified	No				
	<b><u>Blank Covers</u></b>					
4	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
5	100 x 100mm	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 9 New Nutrition Centre, Luminaires and Wireways for Telep					

Item No	Description	Unit	Quantity	Rate	Amount	
6	<b><u>DRAW WIRE</u></b> Galvanised 1,6mm draw wire	m	300			
	<b><u>APPLIANCES</u></b> <b><u>Surface mounted appliance complete</u></b>					
7	16 Ampere photo cell in an empty luminaire	No	1			
	<b><u>SLEEVES</u></b>					
8	50mm dia	m				
9	32mm dia	m	40			
	<b><u>LUMINAIRES</u></b> <b><u>Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps, see Part 2</u></b>					
	<b><u>Type A</u></b>					
10	2 - lamp 58W fluorescent luminaire see Part 2	No	13			
	<b><u>Type B</u></b>					
11	1 - lamp 58W fluorescent luminaire see Part 2	No				
	<b><u>Type C</u></b> <b><u>Bulkhead luminaire with polycarbonate lens see</u></b>					
12	Part 2	No	24			
	<b><u>Type E</u></b> <b><u>2 - lamp 58W fluorescent luminaire Vapourproof</u></b>					
13	Part 2	No	4			
	<b><u>TESTING AND COMMISSIONING</u></b>					
14	Test and commission of the complete electrical installation		Item			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 9 New Nutrition Centre, Luminaires and Wireways for Telep					

44.

45.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Blank Covers</u></b>					
5	100mm dia	No				
6	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
7	300 x 300mm	No				
	<b><u>CONDUCTORS</u></b>					
	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b>					
8	2,5mm <sup>2</sup>	m	1 600			
9	4,0mm <sup>2</sup>	m	800			
10	6,0mm <sup>2</sup>	m				
	<b><u>Bare stranded copper earth conductors drawn into conduits</u></b>					
11	2,5mm <sup>2</sup>	m	1 200			
	<b><u>APPLIANCES</u></b>					
	<b><u>Complete with cover plate fixed in flush boxes (boxes elsewhere measured)</u></b>					
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
12	Switched socket outlet	No	14			
	<b><u>Light Switches</u></b>					
13	16 Ampere 250V grade single lever one way	No	14			
	<b><u>SLEEVES</u></b>					
14	50mm dia	m				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 10 Existing Block 3 (8 x Class room), Internal Electrical Instal					

47.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>SECTION NO. 19</u></b>  <b><u>BILL NO. 11</u></b>  <b><u>EXISTING Block 3 (8 x Class room)</u></b> <b><u>LUMINAIRES AND WIREWAYS FOR</u></b> <b><u>TELEPHONE AND INTERCOM SYSTEM</u></b>  <b><u>(Complete installation : wireways for</u></b> <b><u>telephone and intercom system)</u></b>  <b><u>WIREWAYS AND LUMINAIRES</u></b>  <b><u>Conduit &amp; accessories as specified in Part 2</u></b>  <b><u>Conduit placed in position for casting into concrete</u></b> <b><u>or screed, for building or chased into concrete or</u></b> <b><u>brickwork and for surface mounted in ceiling void</u></b> <b><u>including bending, threading, jointing, short lengths,</u></b> <b><u>draw boxes, couplings, bends, tees and saddles</u></b>					
1	25mm  <b><u>Wall boxes as specified in Part 2 placed in position</u></b> <b><u>for casting into concrete, building or chased into</u></b> <b><u>brickwork including locknuts and bushes</u></b>  <b><u>Where cavity walls or face brick walls are</u></b> <b><u>encountered tenderers must allow to install deep</u></b> <b><u>back to back (one end closed) wall boxes</u></b>	m				
2	100 x 100mm	No				
3	300 x 300 x 75mm including door as specified	No				
	<b><u>Blank Covers</u></b>					
4	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed</u></b> <b><u>in position for casting into concrete, building or</u></b> <b><u>chased into brickwork including locknuts, bushes</u></b> <b><u>and sliding conduit stubs.</u></b>					
5	100 x 100mm	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 11 Existing Block 3 (8 x Class room), Luminaires and Wirewa					



Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>DRAW WIRE</u></b>					
6	Galvanised 1,6mm draw wire	m				
	<b><u>APPLIANCES</u></b>					
	<b><u>Surface mounted appliances complete</u></b>					
7	16 Ampere photo cell in an empty luminaire	No	4			
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
8	Switched socket outlet	No				
	<b><u>Light Switches</u></b>					
9	16 Ampere 250V grade single lever one way	No				
	<b><u>SLEEVES</u></b>					
10	50mm dia	m				
11	32mm dia	m				
	<b><u>LUMINAIRES</u></b>					
	<b><u>Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps, see Part 2</u></b>					
	<b><u>Type A</u></b>					
12	2 - lamp 58W fluorescent luminaire see Part 2	No	38			
	<b><u>Type B</u></b>					
13	1 - lamp 58W fluorescent luminaire see Part 2	No				
	<b><u>Type C</u></b>					
	<b><u>Bulkhead luminaire with polycarbonate lens see</u></b>					
14	Part 2	No	16			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 11 Existing Block 3 (8 x Class room), Luminaires and Wirewa					

R

51.

52.

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Wall boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u></b>					
	<b><u>Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes</u></b>					
4	100 x 50mm	No	9			
5	100 x 100mm	No	26			
	<b><u>Blank Covers</u></b>					
6	100mm dia	No				
7	100 x 100mm	No				
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
8	300 x 300mm	No				
	<b><u>CONDUCTORS</u></b>					
	<b><u>600/1000V grade PVC insulated stranded copper conductors drawn into conduit</u></b>					
9	2,5mm <sup>2</sup>	m	4 000			
10	4,0mm <sup>2</sup>	m	3 000			
11	6,0mm <sup>2</sup>	m				
	<b><u>Bare stranded copper earth conductors drawn into conduits</u></b>					
12	2,5mm <sup>2</sup>	m	2 500			
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 12 Existing Blocks (Library, Multipurpose, Maths & Science) ,					

54.

<div>Section No. 19</div> <div>Bill No. 12</div> <div>Existing Blocks (Library, Multipurpose, Maths &amp; Science) , Internal Electrical</div> <div><b><u>COLLECTION</u></b></div> <div>Total Brought Forward from Page No.</div>					
<div>Carried Forward to Summary of Section No. 19</div> <div>Section No. 19</div> <div>ELECTRICAL INSTALLATION</div> <div>Bill No. 12</div> <div>Existing Blocks (Library, Multipurpose, Maths &amp; Science) ,</div>					

Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>SECTION NO. 19</u></b>  <b><u>BILL NO. 13</u></b>  <b><u>EXISTING BLOCKS (Library, Multipurpose, Maths &amp; Science) LUMINAIRES AND WIREWAYS FOR TELEPHONE AND INTERCOM SYSTEM</u></b>  <b><u>(Complete installation : wireways for telephone and intercom system)</u></b>  <b><u>WIREWAYS AND LUMINAIRES</u></b>  <b><u>Conduit &amp; accessories as specified in Part 2</u></b>  <b><u>Conduit placed in position for casting into concrete or screed, for building or chased into concrete or brickwork and for surface mounted in ceiling void including bending, threading, jointing, short lengths, draw boxes, couplings, bends, tees and saddles</u></b>					
1	25mm  <b><u>Wall boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts and bushes</u></b>  <b><u>Where cavity walls or face brick walls are encountered tenderers must allow to install deep back to back (one end closed) wall boxes</u></b>	m				
2	100 x 100mm	No				
3	300 x 300 x 75mm including door as specified	No				
	<b><u>Blank Covers</u></b>					
4	100 x 100mm	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 13 Existing Blocks (Library, Multipurpose, Maths & Science),					



Item No	Description	Unit	Quantity	Rate	Amount	
	<b><u>Expansion joint boxes as specified in Part 2 placed in position for casting into concrete, building or chased into brickwork including locknuts, bushes and sliding conduit stubs.</u></b>					
5	100 x 100mm	No				
	<b><u>DRAW WIRE</u></b>					
6	Galvanised 1,6mm draw wire	m	700			
	<b><u>APPLIANCES</u></b>					
	<b><u>Surface mounted appliances complete</u></b>					
7	16 Ampere photo cell in an empty luminaire	No	3			
	<b><u>Socket Outlets</u></b>					
	<b><u>16 Ampere round 3-pin 250V grade</u></b>					
8	Switched socket outlet	No				
	<b><u>Light Switches</u></b>					
9	16 Ampere 250V grade single lever one way	No				
	<b><u>SLEEVES</u></b>					
10	50mm dia	m				
11	32mm dia	m				
	<b><u>LUMINAIRES</u></b>					
	<b><u>Installed and mounted to round boxes in brickwork or ceiling including all fixings, brackets, supports, connectors, connections and lamps, see Part 2</u></b>					
	<b><u>Type A</u></b>					
12	2 - lamp 58W fluorescent luminaire see Part 2	No	31			
	<b><u>Type B</u></b>					
13	1 - lamp 58W fluorescent luminaire see Part 2	No				
	<b>Carried to Collection</b>				R	
	Section No. 19 ELECTRICAL INSTALLATION Bill No. 13 Existing Blocks (Library, Multipurpose, Maths & Science),					

58.

59.

60.

61.