

**Name of work:** Providing Electrical arrangements to Construction of Boys Hostel in Thanthai Periyar Government Institute of Technology, Vellore.

EMD: Rs. 30500/-			Date of Tender 20.04.22		
Sl. No.	Approximate Quantity	Description of Work	Rate in Figure & in Words	Per	Amount
1	364 Pts (Three hundred and sixty four points)	Wiring with 2x1.5sqmm (22/0.3) PVC insulated unsheathed SC Cu. Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories with GI modular switch box and junction box with modular white plate in flush with wall with modular 6A FT switch and making good of the concealed portion with suitable colour for PVC concealed modular light point (5 point per coil)		1 Pt (One point)	
2	61 Pts (Sixty one points)	Wiring with 2x1.5sqmm (22/0.3) PVC insulated unsheathed SC Cu. Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories with GI modular switch box and junction box with modular white plates in flush with wall with 6A modular FT switch and making good of the concealed portion with suitable colour for PVC concealed toilet light point (6 point per coil)		1 Pt (One point)	
3	4 Pts (Four points)	Wiring with 3x1.5sqmm (22/0.3) PVC insulated unsheathed SC Cu Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories with GI modular switch box and junction box with modular white plate in flush with wall with 6A modular switch and making good of the concealed portion with suitable colour for PVC concealed stair case light point		1 Pt (One point)	

4	195 Nos (One hundred and ninety five numbers)	Supply and fixing of single box type 4'20 W flu fitting complete with electronic driver (Higher end) with TW round block on wall or ceiling with PVC unsheathed Copper leads from terminals to the fitting with LED tube.		1 No (Each)	
5	6 Nos (Six numbers)	Supply and fixing of single box type 4'20W LED fitting complete electronic driver (Higher end) with conduit pipe suspension with 20W crystal glass LED tube with PVC unsheathed Copper leads from terminals to the fitting with LED tube.		1 No (Each)	
6	2 Nos (Two numbers)	Supply and fixing of 2x2 square type 24W LED 6500K Surface mounting type fitting (Higher end) Complete on wall or ceiling with PVC unloaded leads from terminal to the fitting.		1 No (Each)	
7	53 Nos (Fifty three numbers)	Supply and fixing of battern holder with 9W LED lamb for BH point.		1 No (Each)	
8	126 Nos (One hundred and twenty six numbers)	Supply and fixing of 1200 mm (48") AC ceiling fan (Higher end) complete with stepped electronic regular 300W 500 mm down rod on the existing clamp.		1 No (Each)	

9	35 Nos (Thirty five numbers)	Supply and fixing of WT bulk head fitting with guard (Higher end) suitable for 11W CFL lamp with CFL bulb.		1 No (Each)	
10	10 Nos (Ten numbers)	Supply and fixing of 375 mm (15") sweep (light duty) AC exhaust fan complete without necessary wall opening in the wall.		1 No (Each)	
11	10 Nos (Ten numbers)	Supply and fixing of louver shutter arrangements for 300 mm (12") sweep (light duty) AC exhaust fan.		1 No (Each)	
12	124 Nos (One hundred and twenty four numbers)	Supply and fixing of 3 Nos. 6Amps Modular FT wall socket with 6A modular control switches concealed in suitable GI 12 modular box with modular white plate in flush with wall with earth connection. (Higher end)		1 No (Each)	
13	20 Nos (Twenty numbers)	Supply and fixing of 5A/15A 3 Pin combined wall socket with 15A flush type switch concealed in suitable metal flush Box in flush with wall and covered with 3mm thick hylum sheet with earth connection.		1 No (Each)	

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Contractor

Chief Engineer

14	53 Nos (Fifty three numbers)	Supply and fixing of 16A flush type modular switch on GI 3 module box with front white plate in flush with wall for Room control switch		1 No (Each)	
15	3 Nos (Three numbers)	Supply and fixing of 32A DP MCB 10 KA in suitable sheet steel enclosure in flush with wall with earth connection (Legrand MDS)		1 No (Each)	
16	2 Nos (Two numbers)	Supply and fixing of 32A FP MCB 10 KA in suitable sheet steel enclosure in flush with wall with earth connection (Legrand MDS)		1 No (Each)	
17	14 Nos (Fourteen numbers)	Supply and fixing of 8 way single pole and neutral MCB sheet steel enclosure Distribution board with Double Door and 1No 32 Amps DP MCB 10 KA as incoming , 6 No's 6 Amps to 32 Amps SP MCB 10 KA as outgoing in flush with wall and making good of the concealed portion with earth connection only. The MCB DB and MCB's should be with ISI mark (Higher end)		1 No (Each)	
18	2 Nos (Two numbers)	Supply and fixing of 3 phase 4 way vertical 7 segment TPN sheet steel double door distribution board surface type fitted with bus bar and neutral links with 1 No. 63 Amps 4 pole MCB 10 KA 1No 63A ELCB 30 MA as incoming and 3Nos, 63A DP MCB isolator 10 KA as sub incomer and 12 No's 32A SP MCB 10KA as outgoing in flush with wall and making good of the concealed portion with earth connection only. The MCB DB, and MCB's Like (Higher end)		1 No (Each)	

19	1 No (One number)	Supply and Fixing of 3 Ph 8 way Vertical type MCCB DB with IP 43 protection Double door type DB (legrand) with 1No 160A 4P MCCB 16KA as incoming and 4 No's 63A TP MCB 10 KA & 4 No's 32A TP MCB10 KA as outgoing with cable entry boxes on suitable Al frame work on wall with earth connection only. (The MCCB DB, MCCB's and MCB's should be Higher end)		1 No (Each)	
20	1 No (One number)	Supply and Fixing of 3 Ph 4 way Vertical type MCB DB 10 KA with IP 43 protection Double door type DB (legrand) with 1No 63A 4P MCB 10 KA as incoming and 4 No's 32A TP MCB 10 KA as outgoing in flush with wall and making good of the concealed portion with earth connection only. (The MCB DB and MCB's should be Like legrand /Hager/L&T make) (Kitchen Power)		1 No (Each)	
21	1 No (One number)	Supply and Fixing of 3 Ph 4 way Vertical type MCB DB 10 KA with IP 43 protection Double door type DB (legrand) with 1No 63A 4P MCB 10 KA as incoming and 3 No's 32A TP MCB 10 KA and 3 No's 32A SP MCB 10 KA as outgoing in flush with wall and making good of the concealed portion with earth connection only. (The MCB DB and MCB's should be Higher end make) (Pump room)		1 No (Each)	
22	24 Nos (Twenty four numbers)	Supply and fixing of 30W LED street light fitting with heat resistant toughened glass with IP 65 Protection in suitable dia GI pipe (Class 'B') complete on the existing post or wall with PVC unsheathed Copper leads MS clamps and aluminium painting (Philips /Havels /equivalent )		1 No (Each)	
23	976 Mts (Nine hundred and seventy six metres)	Supply and run of 2 of 1.5 sq.mm. (22/0.3) PVC insulated SC unsheathed Cu. Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with painting of suitable colour.		1 Mt (One Metre)	

24	684 mts (Six hundred and eighty four metres)	Supply and run of 2 of 2.5 sq.mm. (36/0.3) PVC insulated SC unsheathed Cu. Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with painting of suitable colour.		1 Mt (One Metre)	
25	320 mts (Three hundred and twenty metres)	Supply and run of 2 of 2.5 sq mm. (36/0.3) PVC insulated SC unsheathed Cu. Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling and making good of the concealed portion with painting of suitable colour.		1 Mt (One Metre)	
26	635 mts (Six hundred and thirty five metres)	Supply and run of 2 of 4 sq.mm (56/0.3) PVC insulated SC unsheathed Cu. Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire with and making good of the concealed portion with painting of suitable colour.		1 Mt (One Metre)	
27	175 mts (One hundred and seventy five metres)	Supply and run of 4 of 10 sq.mm (140/0.3) PVC insulated SC unsheathed Cu. Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with painting of suitable colour.		1 Mt (One Metre)	
28	300 mts (Three hundred metres)	Supply and laying of 3 1/2 X 95 sq.mm PVC armoured aluminum LTUG cable in a trench to be excavated at dept of 0.75 mtr putting 0.15 layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good.		1 Mt (One Metre)	

29	21 mts (Twenty one metres)	Supply and laying of 3 1/2 X 95 sq.mm PVC armoured aluminum LTUG cable in GI pipe to be excavated at dept of 0.75 mtr and covering the cable completely with bricks and sand and refilling the earth to make good.		1 Mt (One Metre)	
30	38 mts (Thirty eight metres)	Supply and clamping of 31/2x 95 sq.mm PVC LTUG armoured LTUG cable on post or on wall with MS Clamps.		1 Mt (One Metre)	
31	2 Nos (Two numbers)	Supply and fixing of brass cable gland for 31/2 x 95 sq.mm PVC armoured LTUG cable with earth connection.		1 No (Each)	
32	2 Nos (Two numbers)	Supply and providing cable end termination of 3 1/2 x 95 sq.mm PVC LTUG Aluminum armoured cable with necessary aluminium cable sockets by crimping etc. with electrical connection complete.		1 No (Each)	
33	50 Nos (Fifty numbers)	Supply and fixing of LT cable route indicator with suitable angle not less than 38mm x 38mm 6mm and 0.6mtr long excavation of earth to a depth of 0.6mtr and concreting the ground level and making good of the ground as directed by the departmental officers.		1 No (Each)	

34	1 mt (One metre)	Supply and run of 1" x 1/8" copper flat on suitable bus insulators with necessary bolt and nuts on wall floor/ground for earth connection.		1 Mt (One Metre)	
35	20 mts (Twenty metres)	Supply and run of No.8 copper conductor for earth connection		1 Mt (One Metre)	
36	2 Nos (Two numbers)	Earthing as per the ISI specification with an earth electrode of 2.1 mt class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mmx50mmx6mm, with necessary funneling arrangements with necessary masonry work and with 38mm RCC cover slab for the brick masonry.		1 No (Each)	
37	1 No (One number)	Supply and fixing of Gong Bell 12" on suitable angle iron frame work with necessary connections and push bell suitable for 230V A.C. supply.		1 No (Each)	



38	1 No (One number)	<p>Supply and Erection of 400A capacity Dust and Vermin Proof Cubical <b>out door pillar Panel Board</b> made up of 16 SWG CRCA steel with supply and fixing of the following interior mounting fuse switches with HRC fuses arranged in two Horizontal rows with one switch over the other with a central bus bar chamber and two nos of Horizontal cable chambers at the two ends one on each side next to the fuse switch chamber and confirming to IE rules.</p> <ol style="list-style-type: none"> <li>1. 400A FP interior mounting disconnecter fuse switch with HRC fuses-1 no</li> <li>2. 200A TPN interior mounting disconnecter fuse switch with HRC fuse s 4 nos</li> <li>3. 100A TPN interior mounting disconnecter fuse switch with HRC fuse s 3 nos</li> <li>4. Space for fixing 63A switches for future=2nos</li> </ol> <p>(All the switches are Higher end make only)</p> <p>The bus bar chamber will consist of 4nos of 2' x 1/4" size of copper flat for phase and neutral buses on epoxy moulded bus insulators at proper and sufficient spacing between the buses as per IE rules. This busbar chamber should be segregated from the adjacent chambers by providing hylem sheet of suitable thickness as partisans suitable size of copper flats should be provided all round the panel for earth bus.</p> <p>The fuse switches should be connected with the phase and neutral buses with suitable size of copper rod or flat and each switch should be connected with earth with 2 runs of No:8 SWG rigid copper rod with suitable lugs switches should be connected to the buses by suitable size of rigid copper rod/flat. Phase and neutral copper buses should be tinned properly.</p>	1 No (Each)
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39	340 mts (Three hundred and forty metres)	Supply and laying of 3 1/2 X 185 sq.mm PVC armoured aluminum LTUG cable in a trench to be excavated at dept of 0.75 mtr putting 0.15 layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good.		1 Mt (One Metre)	
40	10 mts (Ten metres)	Supply and laying of 3 1/2 X 185 sq.mm PVC armoured aluminum LTUG cable in GI pipe to be excavated at dept of 0.75 mtr and covering the cable completely with bricks and sand and refilling the earth to make good.		1 Mt (One Metre)	
41	24 mts (Twenty four metres)	Supply and clamping of 31/2x 185 sq.mm PVC LTUG armoured LTUG cable on post or on wall with MS Clamps.		1 Mt (One Metre)	

42	2 Nos (Two numbers)	Supply and fixing of brass cable gland for 31/2 x 185 sq.mm PVC armoured LTUG cable with earth connection.		1 No (Each)	
43	2 Nos (Two numbers)	Supply and providing cable end termination of 3 1/2 x 185 sq.mm PVC LTUG Aluminum armoured cable with necessary aluminium cable sockets by crimping etc. with electrical connection complete.		1 No (Each)	
44	6 Nos (Six numbers)	Supply and fixing of 65 mm (2 1/2") GI pipe (Class 'B') of 6 mt. Length with 300mm x 300mm x 6mm MS base plate, duly welded at the bottom with concreting with construction of Masonary pedestal with suitable SMC box to house 6 A SP MCB with MCB on the post 2 mtr above ground level with door and with lock and key arrangements with supply and fixing of 48W LED street light fitting (Higher end) with heat resistant toughened glass with IP 65 Protection in suitable dia GI pipe (Class 'B') complete on the existing post or wall with PVC unsheathed Copper leads MS clarnps and aluminium painting.		1 No (Each)	
45	180 mts (One hundred and eighty metres)	Supply and laying of 4x 16 sq.mm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 metre putting 0.15 mt. Layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good.		1 Mt (One Metre)	

46	12 mts (Twelve metres)	Supply and clamping of 4 x 16 sq.mm PVC LTUGarmoured LTUG cable on post or on wall with MS Clamps.		1 Mt (One Metre)	
47	14 Nos (Fourteen numbers)	Supply and fixing of brass cable gland for 4 x 16 sq.mm PVC armoured LTUG cable, with earthconnection.		1 No (Each)	
48	1 Job (One job)	Preparation of site plan, Physical layout, Electrical line schematic diagram, 10 sets getting drawing approval from CEIG for preparation of completion report, rectification report, etc., and arranging for CEIG inspection and obtaining CEIG's safety certificate, preparation of one set approved drawing and copy of safety certificate and payment of CEIG's inspection fees of Girls Hostel block (LT & HT)		1 Job (One job)	
			TOTAL		
		12%	GST		
			GRAND TOTAL		
	48 Items (Forty eight items)				