

MUNICIPAL CORPORATION OF GREATER MUMBAI
PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS
On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla - 400072
SUMMARY - ELECTRICAL SYSTEM HOSPITAL+ RESIDENTIAL BUILDING

A. SUMMARY - ELECTRICAL SYSTEM HOSPITAL BUILDING

Sr. No.	Description	Amount
1	ELECTRICAL SYSTEM	₹ 29,40,17,367.00
2	ELEVATORS	₹ 4,53,34,076.00
3	AUDIO SYSTEM	₹ 5,53,07,271.00
4	VISUAL PROJECTION	₹ 5,27,16,622.00
5	STAGE LIGHTING	₹ 20,53,570.00
Total		₹ 44,94,28,906.00

B. SUMMARY - ELECTRICAL RESIDENTIAL BUILDING

Sr. No.	Description	Amount
1	ELECTRICAL SYSTEM	₹ 6,12,83,970.00
2	ELEVATORS	₹ 2,76,87,588.00
Total		₹ 8,89,71,558.00
GRAND TOTAL (A+B)		₹ 53,84,00,464.00

MUNICIPAL CORPORATION OF GREATER MUMBAI
PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

BILL OF QUANTITIES HT & LT ELECTRICAL WORKS - HOSPITAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1	BAH-ELEC-FA-01	Supply, Installation testing and Commissioning of IP55 category 22 KV VCB panel with 2 incomers & 4 outgoing breakers as per specifications & SLD of the panel. ALL breakers shall be with A/V/KWH meters and necessary power pack shall be provided ALL incomers & outgoing cables shall be top entry in panel. Scope includes manufacturing, transportation, loading, unloading, shifting to final location, checking of foundation level. interconnection between accessories mounted on HT VCB with mounting of loose accessories supplied by vendor.	1.00	Set	32,85,000.00	32,85,000.00
		EQUIPMENT DETAILS : INCOMING 2 NOS OF 22kV, 800A, 25kA/1SEC, AND OUTGOING 4 NOS OF 22kV, 800A, 25kA/1SEC, INDOOR, VCB, ICOG PANEL No. OF POLES : 3(Three). RATED VOLTAGE : 22kV RATED CURRENT : 800A TEST CONFIRMING TO : IEC:62271-200 / IEC:60694 / IEC:60298				
2	BAH-ELEC-FA-02	Supply, Installation testing and Commissioning of Indoor type Dry type CRT Transformer with Enclosure having 22 KV/0.415 KV voltage levels low loss type with rating of 1600 KVA with OLTC & RTCC Taps on Primary Winding for+ 10% to - 10% in steps of 2.5%, Primary Voltage Variation On Load Tap Changer, No. of switch positions : 9, IS - 11171 - 1985 & IS: 2026 -2011 With Latest standard and Energy efficiency Level, Losses At 50% Loading : 6320 W (Max.), At 100% Loading : 16800 W (Max.) Scope includes Supply transportation, loading, unloading, shifting to final location, checking of foundation level, welding of stoppers on foundation channels, including all labour and materials. Inteconnection between accssories mounted on the transformer & marshalling box along with mounting of loose accessories supplied by	3.00	Nos	58,35,000.00	1,75,05,000.00
3	BAH-ELEC-RA-65	Providing and erecting Heat shrinkable outdoor termination kit for 11 kV (UE)/ 22 kV (E) XLPE HT cable 3x120 to 185 sq. mm. with necessary material as per specification no. CB-JT/HT	25.00	Nos	18,615.00	4,65,375.00
4	BAH-ELEC-RA-66	Providing and erecting Heat shrinkable outdoor termination kit for 11 kV (UE)/ 22 kV (E) XLPE HT cable 3x240 to 400 sq. mm. with necessary material as per specification no. CB-JT/HT	16.00	Nos	24,408.00	3,90,528.00
5	BAH-ELEC-RA-67	Supplying , erecting & terminating 3 x 185 sq. mm. aluminium 22 kV(E), XLPE armoured cable on wall/ceiling or laid in provided trench / pipe in an approved manner as per specification no. CBHT	150.00	Mtr	2,490.00	3,73,500.00
6	BAH-ELEC-RA-68	Supplying , erecting & terminating 3 x 240 sq. mm. aluminium 22 kV(E), XLPE armoured cable on wall/ceiling or laid in provided trench / pipe in an approved manner as per specification no. CBHT	500.00	Mtr	2,902.00	14,51,000.00
7	R2-ME-15-31-a	Providing Round bottom FIRE Bucket of 9 Litres capacity as per IS : 2546 made out of 24 gauge G.I. sheet with extra handle at bottom duly painted white inside and red outside with FIRE Mark, on provided stand/ wall hook.	80.00	Nos	814.00	65,120.00
8	R2-ME-15-31-b	Providing Floor mounting stand for keeping 4 Nos. of FIRE buckets 1500mm in length, 900mm in height frame made out of 30x30x4 mm angle iron with cross supports for legs, welded with 4 hooks and duly painted with one coat of red lead and two coats of silver Paint.	45.00	Nos	4,748.00	2,13,660.00
9	R2-ME-15-31-c	Supplying and erecting Wall hook 225mm projection for keeping fire buckets made out of 15 mm dia. M.S. Rod grouted in wall to a depth of minimum 15cms	45.00	Nos	271.00	12,195.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
10	R2-ME-15-31-d	Supplying standard first aid box with necessary antiseptic cream, medicine for use on wounds due burn, crepe bandage, gauge bandage, medicated ready to use bandage (Bandaid) adhesive tape for medicinal use, scissors, anti-septic solution etc. (All above contents shall be of standard makes)	45.00	Nos	3,392.00	1,52,640.00
11	RBH18-PWD-10-2-30	Supplying and fixing PVC Synthetic elastomer electrically m2 insulating mat with class A insulation conforming to IS: 15652 – 2006 & CPRI tested having 2 mm thickness upto 3.3 Kv	175.00	Sqm	4,867.00	8,51,725.00
12	RBH18-PWD-10-2-31	Supplying and fixing PVC Synthetic elastomer electrically m2 insulating mat with class B insulation conforming to IS: 15652 – 2006 & CPRI tested having 2.5 mm thickness upto 11 kV	200.00	Sqm	5,236.00	10,47,200.00
13	R2-ME-15-30-e	Supplying and erecting D.C.P. type Fire Extinguisher 6 kg capacity cartridge type with Gun Metal cap 150 gram CO2 gas cartridge, powder and brackets conforming to IS 2171- 1985/ IS 15683 and complete erected with necessary clamps made from 50x6 mm M.S. flat with nuts & bolts grouted in wall complete.	40.00	Nos	2,645.00	1,05,800.00
14	R2-ME-5-15-a	Fluorescent emergency light fitting with 1 No. 1 feet (30cms.) single tube 9 / 11 W with M.F. SLA rechargable battery with 3 hrs of back up..	60.00	Nos	1,332.00	79,920.00
15	R2-ME-15-29-a	SITC of Auto glow signage for Emergency Fire Exit	100.00	Nos	814.00	81,400.00
16	R2-ME-15-29-b	SITC of Auto glow signage for Staircase direction	96.00	Nos	814.00	78,144.00
17	R2-ME-15-29-c	SITC of Auto glow signage for Do not use lift in case of Fire etc.	100.00	Nos	1,085.00	1,08,500.00
		Supply, Unloading at site, shifting to final location, assembling, leveling, grouting, erecting, testing and commissioning of following panels as per drawings. Any sort of fabrication work required for erection of panel at site shall be done by the contractor. The contractor shall also check for all the loose joints and continuity of the panel. Any physical or technical defects envisaged by the contractor shall be informed to client as soon as panels are opened As per SLD				
18	BAH-ELEC-FA-04	SITC of LT KIOSK-2 (S/S) As per SLD	3.00	Nos	53,26,850.00	1,59,80,550.00
		LT KIOSK-2 (S/S) including 2500A, 50kA TPN EDO ACB with multi function meter with RS485 port and Modbus protocol. With 3200 amps 4 pole (50 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars.Also including 2000 Amps, 4 pole Automatic power transfer switch for MLTP, 3 Nos. of 1250 amps, TPN,50KA, EDO ACB, as outgoing				
19	BAH-ELEC-FA-05	SITC of MAIN LT PANEL As per SLD	1.00	Nos	76,50,000.00	76,50,000.00
		MAIN LT PANEL Panel comprising of 03 nos. of 2000 amps, TPN, EDO TYPE ACB incomer with 2000 amps 4 pole (50 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars alongwith 02 nos. of 2000 amps, 4 ploer ACB (EDO TYPE) Buscoupler. Panel shall have 03 no. of 1600A, 50KA, TPN EDO Type ACB, 02 no. of 1250A, 50KA, TPN EDO Type ACB, 02 no. of 800A, 50KA, TPN EDO Type ACB, 04 nos of 630A, 35KA, TPN MCCB, 06 nos of 500A, 35KA, TPN MCCB, 06 nos of 400A, 35KA, TPN MCCB , 05 nos of 250A, 35KA, TPN MCCB, 01 nos of 160A, 35KA, TPN MCCB, 01 nos of 100A, 35KA, TPN MCCB as outgoing. All incoming & outgoing feeders shall be provided Meter with ammeter, voltmeter & with communication cable and ready RS485 port and Modbus				
20	BAH-ELEC-FA-06	SITC of APFCR PANEL-700 KVAR - 1 & 2 As per SLD	3.00	Nos	14,56,000.00	43,68,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		APFCR PANEL-700 KVAR - 1 & 2 Panel comprising 1250 amps, 50KA, TP, EDO type ACB as incomer including 1250 amps 4 pole (50 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars and 300 amps 4 pole (50 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 02 nos of 125A, 25KA, TPN MCCB with 02 nos of 50KVAR fixed capacitors, 06 no. 125A, 25KA, TPN MCCB with 06 no. of 50KVAR capacitor , 04 no. 63A, 25KA, TPN MCCB with 04 no. of 25KVAR capacitor, 02 no. 40A, 25KA, TPN MCCB with 02 no. of 15KVAR capacitor and 02 no. 32A, 10KA, TPN MCCB with 02 no. of 10KVAR capacitor bank. Panel shall have 16stage APFC relay as specified				
21	BAH-ELEC-FA-07	SITC of EMERGENCY PANEL As per SLD	1.00	Nos	32,90,000.00	32,90,000.00
		EMERGENCY Panel comprising 1600 Amps, 4 pole, 50KA, ATS suitable 50 kA/1sec. system fault level as per specification.ASCO 7000 series and 1600 amps, TPN, 50KA, EDO type ACB as incomer with voltmeter & ammeter and with 1600 amps 4 pole (50 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 01 no. of 1250A, 50KA, TPN, MDO type ACB with shunt trip command from FAS panel ,02 nos of 630A, 35KA, TPN MCCB, 02 nos of 160A, 35KA, TPN MCCB 01 nos of 125A, 35KA, TPN MCCB, 02 nos of 100A, 35KA, TPN MCCB 01 nos of 80A, 35KA, TPN MCCB, 01 nos of 63 A, 35KA, TPN MCCB, 01 nos of 40A, 35KA, TPN MCCB and 01 no. of 32A, 35KA, TPN MCCB as outgoing. Feeders as specified in SLD shall provided Meter with ammeter, voltmeter & with communication cable and ready RS485 port and Modbus protocol				
22	BAH-ELEC-FA-09	SITC of Medical EQUIPMENT PANEL As per SLD	1.00	Nos	12,50,000.00	12,50,000.00
		Medical EQUIPMENT Panel comprising 02 nos. of electrically interlocked 1250 amps, 50KA, TPN, EDO type ACB as incomer including Meter with ammeter, voltmeter including 1250 amps 4 pole (50 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 05 nos of 250A, 25KA, FP MCCB and 07 nos of 63A, 25KA, FP MCCB as outgoing. All outgoing feeders shall be provided Meter with ammeter, voltmeter & with communication cable and ready RS485 port and Modbus protocol				
23	BAH-ELEC-FA-10	SITC of UPS PANEL 1 As per SLD	1.00	Nos	10,45,000.00	10,45,000.00
		UPS Panel-1 comprising of 03 nos. of 500 amps, 35KA, FP MCCB with surge protection devise as mentioned as incomer with 1600 amps TP+2N (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 03 nos. of 630A, 35KA, TPN MCCB, 01 no of 400A, 35KA, FP MCCB , 03 no of 250A, 35KA, FP MCCB and 01 nos. of 63A 35KA FP MCCB as outgoing				
24	BAH-ELEC-FA-13	SITC of OT PANEL-1 As per SLD	1.00	Nos	14,70,000.00	14,70,000.00
		OT Panel-1 comprising 320 Amps, 4 pole, 35KA, ATS suitable 25 kA/1sec. system fault level as per specification.ASCO 7000 series and 320A, 35KA, TPN MCCB with voltmeter & ammeter as incomer with 320 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 13 nos. of 80 amps, DP MCB with Surge protection device per feeder as specified and 2 nos. of 80 amps, DP MCB as outgoing.				
25	BAH-ELEC-FA-14	SITC of OT PANEL-2 As per SLD	1.00	Nos	7,18,489.00	7,18,489.00
		OT Panel-2 comprising 100 Amps, 4 pole, 35KA, ATS suitable 25 kA/1sec. system fault level as per specification.ASCO 7000 series and 100A, 35KA, TPN MCCB with voltmeter & ammeter as incomer with 100 amps 4 pole (25 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 6 nos. of 80 amps, DP MCB with Surge protection device per feeder as specified and 2 nos. of 80 amps, DP MCB as outgoing.				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
26	BAH-ELEC-FA-15	SITC of CSSD PANEL As per SLD CSSD Panel comprising 400 amps, 25KA, TPN, MCCB as incomer including Meter with ammeter, voltmeter & with communication cable and ready RS485 port and Modbus protocol including 400 amps 4 pole (25 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 09 nos of 63A, 10KA, TPN MCB, 01 no. of 40A, 10KA, TPN MCB, 04no. of 32A, 10KA, TPN MCB, 01 no. of 25A, 10KA, TPN MCB as outgoing.	1.00	Nos	2,50,000.00	2,50,000.00
27	BAH-ELEC-FA-19	SITC of KITCHEN PANEL As per SLD PANTREY PANEL Panel comprising of 400 amps, 35KA, TPN, MCCB with voltmeter & ammeter as incomer with 400 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 10 nos. of 40A, TPN MCB, as outgoing.	1.00	Nos	2,30,000.00	2,30,000.00
28	BAH-ELEC-FA-21	SITC of LIGHTING & POWER PANEL As per SLD NON DG PANEL 3rd QUADRANT Panel comprising of 400 amps, 35KA, TPN, MCCB with voltmeter & ammeter as incomer with 400 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 02 nos. of 250A, TP MCCB, 11 nos of 80A, TPN MCB, 03 no. of 63A, TPN MCCB, as outgoing.	2.00	Nos	3,50,000.00	7,00,000.00
29	BAH-ELEC-FA-26	SITC of LIFT PANEL As per SLD LIFT Panel comprising of 320 amps, 35KA, TPN, MCCB with voltmeter & ammeter as incomer with 320 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 04 nos of 100A TPN MCB, 01 no. of 63A, TPN MCB, 01 no. of 40A, TPN MCB, 05 no. of 32A, TPN MCB, 03 no. of 20A, TPN MCB as outgoing.	2.00	Nos	2,10,000.00	4,20,000.00
30	RBH18-ELEC-FA-28	Supplying,erecting & making 500A FP MCCB,35KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	5.00	Nos	1,32,559.00	6,62,795.00
31	RBH18-ELEC-FA-29	Supplying,erecting & making 250A FP MCCB,35KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	1,06,403.32	1,06,403.32
32	RBH18-ELEC-FA-30	Supplying,erecting & making 63A FP MCCB,25KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	2.00	Nos	71,518.64	1,43,037.28
33	RBH18-ELEC-FA-31	Supplying,erecting & making 100A FP MCCB,25KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	3.00	Nos	71,518.64	2,14,555.92
34	RBH18-ELEC-FA-37	Supplying,erecting & making 150/160A FP ATS,25KA (Asco - 230series) with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	83,250.88	83,250.88
35	RBH18-ELEC-FA-38	Supplying,erecting & making 200A FP ATS,25KA (Asco - 230series) with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	91,179.48	91,179.48
36	RBH18-ELEC-FA-39	Supplying,erecting & making 250A FP ATS,25KA (Asco - 230series) with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	95,143.20	95,143.20

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		Supply, Installation, testing and connection of 3P4W+50%E internally earthed Al. Bus duct as per rating given below with all necessary fabrication of supports and other accessories works complete as per specification. All joints / tees / bends / phase change over boxes/ Flange End/Horizontal Bend/Vertical Bend/Plug-in Point/ Vertical Spring Hanger/Fix hanger/ End Cover/ Horizontal Fixing Clips/Tinned Copper Braided Flexibles -360mm (with Hardware - Nuts and Bolts) etc are deemed to be included in the Rmt supply. - Sandwich type - IP 55 unless otherwise specified in item. Minimum fault level of Bus duct shall be as per panel but bot less then 35 kA. Arrangement for tapping earth as per requirement & approved shop drawings.All necessary supports & work for installation of busduct shall be included in quoted cost.All joint in horizontal ran shall have ip65 protection.Type test Certificates are from ERDA (ASTA Accredited) lab as per IEC 61439 Part 1 and 6 Temperature rise design as per Latest IEC 61439 Part 1 and 6				
37	MTAR-EL-14	2500 amps 50KA SC for 1 sec	150.00	Mtr	68,970.00	1,03,45,500.00
38	BAH-ELEC-FA-29	SITC of 415V/690V/1000V Sandwich construction Busbar trunking system with Multilayer Class-F insulation and; Conductors : Aluminium Rating : 630A Configuration : 3P4W+50%E IP Rating : IP54 Enclosure : GI 1.6mm thickness Impulse Withstand Voltage : 8kV Paint Shade : RAL7032 Epoxy Powder Coating Straight Run Feeder IP55	120.00	Mtr	48,393.00	58,07,160.00
39	BAH-ELEC-FA-30	SITC of 415V/690V/1000V Sandwich construction Busbar trunking system with Multilayer Class-F insulation and; Conductors : Aluminium Rating : 400A Configuration : 3P4W+50%E IP Rating : IP54 Enclosure : GI 1.6mm thickness Impulse Withstand Voltage : 8kV Paint Shade : RAL7032 Epoxy Powder Coating Straight Run Feeder IP55	60.00	Mtr	38,742.00	23,24,520.00
40	BAH-ELEC-FA-32	SITC of Feed units in following ratings for above Rising main. 1 Nos. 630A, 415V, Ics=35kA, 4P MCCB with a set of CT's., Multi Function meter (V, A, kWh, KVAh, KW, KVA, KVAR, PF, Hz.) with Phase Indicating Lamps with MCB. End feed Panel with switchgear (Suitable for MCCB) - Al Busbar Arrangement , Complete with Aluminium busbar or Cu Flexible with provision for rotary handle mechanism with bottom Cable entry and top Busduct outgoing provision.	3.00	Nos	1,45,000.00	4,35,000.00
41	BAH-ELEC-FA-33	SITC of Feed units in following ratings for above Rising main. 1 Nos. 400A, 415V, Ics=35kA, 4P MCCB with a set of CT's., Multi Function meter (V, A, kWh, KVAh, KW, KVA, KVAR, PF, Hz.) with Phase Indicating Lamps with MCB. End feed Panel with switchgear (Suitable for MCCB) - Al Busbar Arrangement , Complete with Aluminium busbar or Cu Flexible with provision for rotary handle mechanism with bottom Cable entry and top Busduct outgoing provision.	2.00	Nos	1,10,976.00	2,21,952.00
42	BAH-ELEC-FA-34	SITC of Feed units in following ratings for above Rising main. 1 Nos. 250A, 415V, Ics=35kA, 4P MCCB with a set of CT's., Multi Function meter (V, A, kWh, KVAh, KW, KVA, KVAR, PF, Hz.) with Phase Indicating Lamps with MCB. End feed Panel with switchgear (Suitable for MCCB) - Al Busbar Arrangement , Complete with Aluminium busbar or Cu Flexible with provision for rotary handle mechanism with bottom Cable entry and top Busduct outgoing provision.	5.00	Nos	1,01,061.00	5,05,305.00
		SITC of tap off boxes with MCCBs. All MCCBs shall be with thermal magnetic adjustable releases for O/L and S/C. The MCCBs shall have Ics = 100% Icu. All tap of boxes shall support the cable sizes given in SLD along with tender.				
43	BAH-ELEC-FA-35	160/200 A,FP,25KA.	2.00	Nos	21,793.00	43,586.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
44	BAH-ELEC-FA-36	125 A,FP,25KA.	3.00	Nos	14,800.00	44,400.00
45	BAH-ELEC-FA-37	100 A,FP,25KA.	4.00	Nos	10,500.00	42,000.00
46	BAH-ELEC-FA-38	80 A,FP,25KA.	5.00	Nos	10,500.00	52,500.00
47	BAH-ELEC-FA-39	63 A,FP,25KA.	12.00	Nos	10,500.00	1,26,000.00
48	BAH-ELEC-FA-40	40 A,FP,25KA.	50.00	Nos	10,500.00	5,25,000.00
49	BAH-ELEC-FA-41	SITC of Plug-in Box with Mechanical Interlocking suitable for L&T MCCB but without Switchgear standard size for 16A to 100A	33.00	Nos	13,435.00	4,43,355.00
50	BAH-ELEC-FA-42	SITC of Plug-in Box with Mechanical Interlocking suitable for L&T MCCB but without Switchgear standard size For 125A to 250A	10.00	Nos	9,485.00	94,850.00
		Supply, Unloading at site, shifting to final location, assembling, leveling, grouting, erecting, testing and commissioning of following panels as per drawings. Any sort of fabrication work required for erection of panel at site shall be done by the contractor. The contractor shall also check for all the loose joints and continuity of the panel. Any physical or technical defects envisaged by the contractor shall be informed to client as soon as panels are opened.As per SLD				
51	R2-ME-2-8	Excavating the trenches and refilling,reinstatement of the same after the cable is laid in approved manner (750 mm deep, 600 mm wide),in all types of soils 1 Cu. Mtr. = 2.2 RMT.	200.00	Cu. Mtr.	307.00	61,400.00
52	R2-ME-2-9	Excavating the trenches and refilling the same after the cable is laid in approved manner (Size of trench: 750 mm deep, 600 mm wide) in concrete/ masonry / asphalt. 1 Cu. Mtr. = 2.2 RMT. And reinstatement.	500.00	Cu. Mtr.	500.00	2,50,000.00
		G.I. Cable tray with all other accessories : Perforated Type				
		Readymade 2500mm standard length, prefabricated, perforated cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. Galvanisation thickness shall be minimum 86 Micron.				
53	R2-ME-2-13-a	75 x 25mm (W x H) - (16 SWG - 1.6mm) without cover	120.00	Mtr	1,074.00	1,28,880.00
54	R2-ME-2-13-b	100 x 25mm (W x H) - (16 SWG - 1.6mm) without cover	600.00	Mtr	1,197.00	7,18,200.00
55	R2-ME-2-13-c	150 x 25mm (W x H) - (16 SWG - 1.6mm) without cover	500.00	Mtr	1,237.00	6,18,500.00
56	R2-ME-2-13-d	200 x 50mm (W x H) - (16 SWG - 1.6mm) without cover	200.00	Mtr	1,522.00	3,04,400.00
57	R2-ME-2-13-e	300 x 50mm (W x H) - (16 SWG - 1.6mm) without cover	750.00	Mtr	2,067.00	15,50,250.00
58	R2-ME-2-13-k	450 x 75mm (W x H) - (14SWG - 2mm) without cover	200.00	Mtr	3,533.00	7,06,600.00
59	R2-ME-2-13-l	600 x 75mm (W x H) - (14SWG - 2mm) without cover	200.00	Mtr	4,167.00	8,33,400.00
		G.I. Cable tray with all other accessories : Ladder Type				
		Readymade 2500mm standard length, prefabricated, Ladder type cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. 50 mm side flanges shall be provided. Galvanisation thickness shall be minimum 86 Micron.				
60	R2-ME-2-14-f	750 x 75mm (W x H) - (12SWG - 2.5mm)	100.00	Mtr	1,086.00	1,08,600.00
61	R2-ME-2-14-g	1000 x 75mm (W x H) - (12SWG - 2.5mm)	50.00	Mtr	1,236.00	61,800.00
		CABLES, EXCAVATION, G.I. CABLE TRAYS & ACCESSORIES, CABLE JOINTS, CABLE PROTECTION PIPE.				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		G.I. Trunking / Duct / Raceway & all other accessories				
		Readymade 2500mm standard length, prefabricated, GI trunking from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. 50 mm side flanges shall be provided. Galvanisation thickness shall be minimum 86 Micron. cost of trunking shall be included junction box of suitable size, and all other accessories required to complete the work.				
62	R2-ME-2-15-c	100 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	400.00	Mtr	690.00	2,76,000.00
63	R2-ME-2-15-d	150 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	500.00	Mtr	906.00	4,53,000.00
64	R2-ME-2-15-e	300 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	250.00	Mtr	1,498.00	3,74,500.00
		PVC Trunking with cover & all other accessories				
		Following sizes PVC trunking with cover and all other accessories to complete the work like bend, partion, internal and external angles etc. cost of trunking shall be included base, cover, finishing accessories, junction boxes and mounting wiring accessories.				
65	R2-ME-2-16-a	50 x 50mm (W x H) - PVC Trunking with cover	120.00	Mtr	280.00	33,600.00
66	R2-ME-2-16-b	80 x 50 mm (W x H) - PVC Trunking with cover	120.00	Mtr	676.00	81,120.00
67	R2-ME-2-16-c	100 x 50mm (W x H) - PVC Trunking with cover	200.00	Mtr	1,090.00	2,18,000.00
68	R2-ME-2-16-d	150 x 50mm (W x H) - PVC Trunking with cover	200.00	Mtr	2,129.00	4,25,800.00
		SWITCHGEARS, MCB DB, PANELS				
		Distribution Board (Box only)				
	R2-ME-1-15	IP43 SPN & TPN Distribution board with metal door of various sizes on wall/ Column/ floor mounting, with detachable gland plate, terminal connectors and other required hardware & fasteners. DB shall be designed for incoming MCB & no. of outgoing MCB as per requirement or no. of outgoing way (Cost of the DBs will be without MCB, MCCB & other accessories)				
69	R2-ME-1-15-a	IP43 8 Way SPN DB (4 + 4Way)	15.00	Nos	2,458.00	36,870.00
70	R2-ME-1-15-b	IP43 12 Way SPN DB (4 + 8Way)	20.00	Nos	2,955.00	59,100.00
71	R2-ME-1-15-c	IP43 16 Way SPN DB (4 + 12Way)	12.00	Nos	3,708.00	44,496.00
72	R2-ME-1-15-d	IP43 4 Way TPN DB (8 + 12Way)	12.00	Nos	4,846.00	58,152.00
73	R2-ME-1-15-e	IP43 6 Way SPN DB (8 + 18Way)	4.00	Nos	5,976.00	23,904.00
74	R2-ME-1-15-f	IP43 8 Way SPN DB (8 + 24Way)	20.00	Nos	7,164.00	1,43,280.00
75	R2-ME-1-15-g	IP43 12 Way SPN DB (8 + 36Way)	10.00	Nos	10,733.00	1,07,330.00
76	R2-ME-1-15-h	IP43 16 Way SPN DB (8 + 48Way)	4.00	Nos	13,308.00	53,232.00
		MCCB incomer and MCB outgoing Distribution Board				
	R2-ME-1-16	IP 43 & IP 30 Vertical TPN Distribution Board with Modular Incomer with Metal door (Box only) of of various sizes on wall/ Column/ floor mounting, with detachable gland plate, terminal connectors and other required hardware & fasteners. DB shall be designed with provision for MCCB as incomer & SP / TP MCB as outgoing as per requirement. (Cost of the DBs will be without MCB, MCCB). DB shall be as per IS 8623- 1 & 3 / IEC 61439- 1 & 3				
77	R2-ME-1-16-a	IP 43 4 Way MCCB DB (125/160A MCCB + 4Way TP MCB /12 Way SP MCB)	8.00	Nos	14,396.00	1,15,168.00
78	R2-ME-1-16-b	IP 43 4 Way MCCB DB (250A MCCB + 4Way TP MCB /12 Way SP MCB)	2.00	Nos	26,651.00	53,302.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
79	R2-ME-1-16-c	IP 43 8 Way MCCB DB (125/160A MCCB + 8Way TP MCB /24 Way SP MCB)	8.00	Nos	17,998.00	1,43,984.00
80	R2-ME-1-16-d	IP 43 8 Way MCCB DB (250A MCCB + 8Way TP MCB /24 Way SP MCB)	2.00	Nos	31,119.00	62,238.00
81	R2-ME-1-16-e	IP 43 12 Way MCCB DB (125/160A MCCB + 12Way TP MCB /36 Way SP MCB)	5.00	Nos	24,072.00	1,20,360.00
82	R2-ME-1-16-f	IP 43 12 Way MCCB DB (250A MCCB + 12Way TP MCB /36 Way SP MCB)	2.00	Nos	32,796.00	65,592.00
83	R2-ME-1-15-l	Supply, installation, testing & commissioning of distribution boards, 12 way VTPN type DB with door	4.00	Nos	20,443.00	81,772.00
84	R2-ME-1-15-m	Supply, installation, testing & commissioning of distribution boards, 8 way VTPN type DB with door	10.00	Nos	15,195.00	1,51,950.00
85	R2-ME-1-15-n	Supply, installation, testing & commissioning of distribution boards, 4 way VTPN type DB with door	21.00	Nos	11,946.00	2,50,866.00
86	R2-ME-1-15-ag	IP 43 TPN Distribution Board with metal door (Box only) 4 Way (4 + 12 way)	8.00	Nos	5,279.00	42,232.00
87	R2-ME-1-15-ai	IP 43 TPN Distribution Board with metal door (Box only) 6 Way (8 + 18 way)	8.00	Nos	6,866.00	54,928.00
88	R2-ME-1-15-aj	IP 43 TPN Distribution Board with metal door (Box only) 8 Way (8 + 24 way)	16.00	Nos	8,176.00	1,30,816.00
89	R2-ME-1-15-ak	IP 43 TPN Distribution Board with metal door (Box only) 12 Way (8 + 36 way)	60.00	Nos	12,209.00	7,32,540.00
		MCB				
	R2-ME-1-17	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required.				
90	R2-ME-1-17-b	10A SP MCB	1,060.00	Nos	335.00	3,55,100.00
91	R2-ME-1-17-c	16A/20A SP MCB	552.00	Nos	335.00	1,84,920.00
92	R2-ME-1-17-d	32A SP MCB	10.00	Nos	335.00	3,350.00
93	R2-ME-1-17-g	10A DP MCB	20.00	Nos	995.00	19,900.00
94	R2-ME-1-17-h	16A/20A DP MCB	20.00	Nos	995.00	19,900.00
95	R2-ME-1-17-i	32A DP MCB	250.00	Nos	995.00	2,48,750.00
96	R2-ME-1-17-j	63A DP MCB	40.00	Nos	1,600.00	64,000.00
97	R2-ME-1-17-k	10A TP MCB	60.00	Nos	1,621.00	97,260.00
98	R2-ME-1-17-l	16A/20A TP MCB	100.00	Nos	1,621.00	1,62,100.00
99	R2-ME-1-17-m	32A TP MCB	10.00	Nos	1,621.00	16,210.00
100	R2-ME-1-17-n	63A TP MCB	10.00	Nos	2,478.00	24,780.00
101	R2-ME-1-17-t	10A 4P MCB	2.00	Nos	2,193.00	4,386.00
102	R2-ME-1-17-u	16A/20A 4P MCB	60.00	Nos	2,193.00	1,31,580.00
103	R2-ME-1-17-aj	25A FP MCB	10.00	Nos	2,360.00	23,600.00
104	R2-ME-1-17-v	32A 4P MCB	45.00	Nos	2,193.00	98,685.00
105	R2-ME-1-17-w	63A 4P MCB	97.00	Nos	3,161.00	3,06,617.00
106	R2-ME-1-17-ap	MCB 'C' Curve, 15kA - 80A FP MCB	1.00	Nos	14,635.00	14,635.00
		MCCB				
	R2-ME-1-18	Unit rate of 415V, 10kA/16kA, Moulded case circuit breaker with Thermal magnetic overload suitable for DB mounting complete with connection, testing & commissioning etc. as required.				
107	R2-ME-1-18-c	100A 4P MCCB	5.00	Nos	5,299.00	26,495.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
108	R2-ME-1-18-d	125A 4P MCCB	6.00	Nos	8,887.00	53,322.00
109	R2-ME-1-18-f	160A 4P MCCB	4.00	Nos	10,961.00	43,844.00
110	R2-ME-1-18-h	200A 4P MCCB	1.00	Nos	8,628.00	8,628.00
111	R2-ME-1-18-i	250A TPN MCCB	1.00	Nos	18,233.00	18,233.00
		MCBs in 16SWG sheet steel metal box				
	R2-ME-1-19	MCBs In 16 SWG CRCA sheet steel enclosure, powder coated, wall / column mounted with provision for support arrangement, 2 earthing terminal, Incoming & outgoing cable terminal etc. with required hardware & fasteners. All MCCBs shall be rated for 10kA, 'C' curve type. Colour shade shall be RAL 7032 Smoke gray as per IS 5 IP 43 Enclosure				
112	R2-ME-1-19-a	16/32 Amp. DP MCB	20.00	Nos	2,974.00	59,480.00
113	R2-ME-1-19-b	16/32 Amp. TPN MCB	20.00	Nos	4,174.00	83,480.00
114	R2-ME-1-19-c	63 Amp. TPN MCB	20.00	Nos	5,143.00	1,02,860.00
115	R2-ME-1-19-d	20Amp SP MCB with 20A ray roll type, 3pin plug & socket with cap & chain etc.	40.00	Nos	2,121.00	84,840.00
116	R2-ME-1-19-e	32Amp TPN MCB with 32A ray roll type, 5pin plug & socket with cap & chain etc.	40.00	Nos	6,769.00	2,70,760.00
		Earth Leakage circuit Breaker / Residual Current circuit Breaker				
	R2-ME-1-25	ELCBs In 16 SWG CRCA sheet steel enclosure, powder coated, wall / column mounted with provision for support arrangement, 2 earthing terminal, Incoming & outgoing cable terminal etc. Colour shade shall be RAL 7032 Smoke gray as per IS 5.				
		with 300mA Sensitivity				
117	R2-ME-1-25-m	25Amp. 2Pole	2.00	Nos	4,509.00	9,018.00
118	R2-ME-1-25-n	40Amp. 2Pole	20.00	Nos	5,079.00	1,01,580.00
119	R2-ME-1-25-n1	63Amp. 2Pole	291.00	Nos	6,064.00	17,64,624.00
120	R2-ME-1-25-p	40Amp. 4Pole	4.00	Nos	5,917.00	23,668.00
121	R2-ME-1-25-q	63Amp. 4Pole	6.00	Nos	6,707.00	40,242.00
		with 100mA Sensitivity				
122	R2-ME-1-25-a	16Amp. 2Pole ELCB	10.00	Nos	4,355.00	43,550.00
123	R2-ME-1-25-b	25Amp. 2Pole ELCB	10.00	Nos	4,509.00	45,090.00
124	R2-ME-1-25-c	40Amp. 2Pole ELCB	10.00	Nos	5,079.00	50,790.00
125	R2-ME-1-25-d	16Amp. 4Pole ELCB	5.00	Nos	5,364.00	26,820.00
126	R2-ME-1-25-e	25Amp. 4Pole ELCB	5.00	Nos	5,844.00	29,220.00
127	R2-ME-1-25-f	40Amp. 4Pole ELCB	5.00	Nos	5,917.00	29,585.00
128	R2-ME-1-25-g	63Amp. 4Pole ELCB	5.00	Nos	6,707.00	33,535.00
		with 30mA Sensitivity				
129	R2-ME-1-25-h	25Amp. 2Pole	5.00	Nos	4,355.00	21,775.00
130	R2-ME-1-25-i	40Amp. 2Pole	30.00	Nos	4,843.00	1,45,290.00
131	R2-ME-1-25-j	25Amp. 4Pole	25.00	Nos	5,524.00	1,38,100.00
132	R2-ME-1-25-k	40Amp. 4Pole	25.00	Nos	5,698.00	1,42,450.00
133	R2-ME-1-25-l	63Amp. 4Pole	25.00	Nos	6,422.00	1,60,550.00
134	RBH18-PWD-5-6-3	Providing, erecting & commissioning RCCB only of electro magnetic type with 30mA sensitivity and having capacity of 63 A. 2 pole complete as per specification No. SW- RCCB/RCCB	8.00	Nos	3,252.00	26,016.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
135	RBH18-PWD-5-6-15	Supply & fixing CRCA sheet box with earthing terminals for housing 2 pole RCCB/RCCB + MCB complete on iron frgme/laminated board.	80.00	Nos	226.00	18,080.00
136	RBH18-PWD-5-6-16	Supply & fixing CRCA sheet box with earthing terminals for housing 4 pole RCCB/RCCB + MCB complete on iron frgme/laminated board.	90.00	Nos	292.00	26,280.00
		Supply, Laying of cables on cable trays, structural supports and cable supports provided, include unloading, shifting upto site. The scope includes clamping of cables by ready made G.I. spacers, saddles or clamps fabricated out of M.S. strip 3 mm thick, Treasing and Clamping of Cable on cable tray, supply of all clamping materials and hardware etc., providing cable tags made out of aluminium strip and 75x20 mm in size with cable number and size punched on it. Cable tags shall be tied to cables at every 10 meter interval and at both the ends. All cables shall be of CU FRLSZH category.				
137	R2-ME-2-3a-d	6C x 1.5 Sq.mm Cu. FRLSZH Cable	400.00	Mtr	169.00	67,600.00
138	R2-ME-2-3a-h	6C x 2.5 Sq.mm Cu. FRLSZH Cable	400.00	Mtr	247.00	98,800.00
139	R2-ME-2-3a-f	3C x 2.5 Sq.mm Cu. FRLSZH Cable	2,500.00	Mtr	142.00	3,55,000.00
140	R2-ME-2-3a-j	3C x 4 Sq.mm Cu. FRLSZH Cable	3,500.00	Mtr	203.00	7,10,500.00
141	R2-ME-2-3a-n	3C x 6 Sq.mm Cu. FRLSZH Cable	250.00	Mtr	263.00	65,750.00
142	R2-ME-2-3a-r	3C x 10 Sq.mm Cu. FRLSZH Cable	100.00	Mtr	410.00	41,000.00
143	RBH18-ELEC-FA-56	3C x 16 Sq.mm Cu. FRLSZH Cable	500.00	Mtr	684.40	3,42,200.00
144	R2-ME-2-3a-g	4C x 2.5 Sq.mm Cu.FRLSZH Cable	2,000.00	Mtr	178.00	3,56,000.00
145	R2-ME-2-3a-k	4C x 4.0 Sq.mm Cu. FRLSZH Cable	1,200.00	Mtr	273.00	3,27,600.00
146	R2-ME-2-3a-o	4C x 6.0 Sq.mm Cu. FRLSZH Cable	2,000.00	Mtr	337.00	6,74,000.00
147	R2-ME-2-3a-s	4C x 10 Sq.mm Cu. FRLSZH Cable	700.00	Mtr	597.00	4,17,900.00
148	R2-ME-2-3a-u	4C x 16 Sq.mm Cu. FRLSZH Cable	750.00	Mtr	863.00	6,47,250.00
149	R2-ME-2-3a-v	4C x 25 Sq.mm Cu. FRLSZH Cable	175.00	Mtr	1,450.00	2,53,750.00
150	R2-ME-2-3a-w	3.5C x 35 Sq.mm Cu. FRLSZH Cable	1,000.00	Mtr	1,740.00	17,40,000.00
151	R2-ME-2-3a-x	3.5C x 50 Sq.mm Cu. FRLSZH Cable	1,200.00	Mtr	2,416.00	28,99,200.00
152	R2-ME-2-3a-y	3.5C x 70 Sq.mm Cu. FRLSZH Cable	500.00	Mtr	3,419.00	17,09,500.00
153	R2-ME-2-3a-z	3.5C x 95 Sq.mm Cu. FRLSZH Cable	500.00	Mtr	4,923.00	24,61,500.00
154	R2-ME-2-3a-aa	3.5C x 120 Sq.mm Cu.FRLSZH Cable	750.00	Mtr	6,309.00	47,31,750.00
155	R2-ME-2-3a-ab	3.5C x 150 Sq.mm Cu. FRLSZH Cable	650.00	Mtr	7,624.00	49,55,600.00
156	R2-ME-2-3a-ac	3.5C x 185 Sq.mm Cu. FRLSZH Cable	550.00	Mtr	9,510.00	52,30,500.00
157	R2-ME-2-3a-ad	3.5C x 240 Sq.mm Cu. FRLSZH Cable	750.00	Mtr	12,215.00	91,61,250.00
158	R2-ME-2-3a-ae	3.5C x300 Sq.mm Cu. FRLSZH Cable	700.00	Mtr	15,216.00	1,06,51,200.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of Double compression cable glands, stripping of cable insulation, supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, G.I nut - bolts and G.I washers , consumables and other hardware materials as required to make the installation complete, are in the scope. All G.I Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core &				
159	R2-ME-2-12-g	3C x 2.5 Sq.mm	40.00	Nos	113.00	4,520.00
160	R2-ME-2-12-h	3C x 4 Sq.mm	50.00	Nos	172.00	8,600.00
161	R2-ME-2-12-i	3C x 6 Sq.mm	70.00	Nos	176.00	12,320.00
162	R2-ME-2-12-k	3C x 10 Sq.mm	3.00	Nos	187.00	561.00
163	R2-ME-2-12-l	3C x 16 Sq.mm	40.00	Nos	332.00	13,280.00
164	R2-ME-2-12-p	4C x 2.5 Sq.mm	210.00	Nos	173.00	36,330.00
165	R2-ME-2-12-q	4C x 4 Sq.mm	500.00	Nos	179.00	89,500.00
166	R2-ME-2-12-r	4C x 6 Sq.mm	300.00	Nos	186.00	55,800.00
167	R2-ME-2-12-s	4C x 10 Sq.mm	120.00	Nos	199.00	23,880.00
168	R2-ME-2-12-t	4C x 16 Sq.mm	80.00	Nos	349.00	27,920.00
169	R2-ME-2-12-u	4C x 25 Sq.mm	50.00	Nos	360.00	18,000.00
170	R2-ME-2-12-v	3.5C x 35 Sq.mm	60.00	Nos	363.00	21,780.00
171	R2-ME-2-12-w	3.5C x 50 Sq.mm	60.00	Nos	465.00	27,900.00
172	R2-ME-2-12-x	3.5C x 70 Sq.mm	20.00	Nos	602.00	12,040.00
173	R2-ME-2-12-y	3.5C x 95 Sq.mm	28.00	Nos	1,188.00	33,264.00
174	R2-ME-2-12-z	3.5C x 120 Sq.mm	46.00	Nos	1,301.00	59,846.00
175	R2-ME-2-12-aa	3.5C x 150 Sq.mm	16.00	Nos	1,657.00	26,512.00
176	R2-ME-2-12-ab	3.5C x 185 Sq.mm	10.00	Nos	2,110.00	21,100.00
177	R2-ME-2-12-ac	3.5C x 240 Sq.mm	20.00	Nos	2,797.00	55,940.00
178	R2-ME-2-12-ad	3.5C x 300 Sq.mm	226.00	Nos	3,805.00	8,59,930.00
179	R2-ME-2-12-ae	3.5C x 400 Sq.mm	3.00	Nos	5,759.00	17,277.00
180	R2-ME-2-12-af	6C x 1.5Sq.mm	20.00	Nos	179.00	3,580.00
181	R2-ME-2-12-ag	6C x 2.5 Sq.mm	20.00	Nos	183.00	3,660.00
		1.8 Modular switches and Accessories				
182	RBH18-PWD-1-8-1	Supplying and erecting modular type switch 6A / 10A ISI mark approved make duly erected on provided plate and box with wiring connections complete.	250.00	Nos	89.00	22,250.00
183	RBH18-PWD-1-8-7	Supplying and erecting modular type switch one way 16 / 20 A, ISI mark, approved make duly erected on provided plate and box with wiring connections complete with neon indicator.	2,550.00	Nos	146.00	3,72,300.00
184	RBH18-PWD-1-8-10	Supplying and erecting modular type 3 pin 6A multi socket with safety shutter ISI mark approved make duly erected on provided plate and box with wiring connections complete.	200.00	Nos	116.00	23,200.00
185	RBH18-PWD-1-8-11	Supplying and erecting modular type 3 pin 6 / 16A multi socket with safety shutter ISI mark approved make duly erected on provided plate and box with wiring connections complete.	2,420.00	Nos	179.00	4,33,180.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
186	RBH18-PWD-1-8-37	Supplying and erecting unbreakable concealed type modular switch box with double mounting plate for 3 module duly erected flush to wall with required chiselling and finishing with cement mortar / POP as per required to match the background in an approved manner.	2,480.00	Nos	273.00	6,77,040.00
		MAINS AND SUBMAINS WIRING, POINT WIRING WIRING FOR SUBMAINS/ CIRCUIT WIRING				
	R2-ME-3-21	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLSZH insulated copper conductor wire in surface/ recessed medium class PVC conduit as required				
187	R2-ME-3-21-a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire in 20mm Conduit	74,200.00	Mtr	116.00	86,07,200.00
188	R2-ME-3-21-b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire in 20mm Conduit	51,200.00	Mtr	159.00	81,40,800.00
189	R2-ME-3-21-c	2 X 4 sq. mm + 1 X 4 sq. mm earth wire in 25mm Conduit	29,540.00	Mtr	231.00	68,23,740.00
190	R2-ME-3-21-d	2 X 6 sq. mm + 1 X 6 sq. mm earth wire in 25mm Conduit	450.00	Mtr	317.00	1,42,650.00
191	R2-ME-3-21-k	4 X 4 sq. mm + 2 X 4 sq. mm earth wire in 38mm Conduit	450.00	Mtr	431.00	1,93,950.00
192	R2-ME-3-1-l	4 X 6 sq. mm + 2 X 6 sq. mm earth wire in 38mm Conduit	485.00	Mtr	532.00	2,58,020.00
193	R2-ME-3-21-m	4 X 10 sq. mm + 2 X 10 sq. mm earth wire in 38mm Conduit	450.00	Mtr	902.00	4,05,900.00
	R2-ME-3-42	Point wiring by using FRLSZH insulated copper conductors (along with same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose) using PVC CONDUIT				
194	R2-ME-3-42-a	Light /Fan / Ex. fan Points	5,500.00	Each Pt.	799.00	43,94,500.00
195	R2-ME-3-42-k	Group Control Point Wiring 4-8 Points Controlled by One 15 A SP Switch	124.00	Each Pt.	419.00	51,956.00
196	R2-ME-3-42-j	5A/6A - 3/5 Pin Plug On Board	76.00	Each Pt.	188.00	14,288.00
197	R2-ME-3-42-i	15 / 5 A / 6 A Combined Power Plug Socket Point with Fuse and Indicating Lamp, One 15 Amp SP Switch	76.00	Each Pt.	1,346.00	1,02,296.00
198	R2-ME-3-42-b	2/3 Pin Independent Plug (IP)	126.00	Each Pt.	842.00	1,06,092.00
	R2-ME-3-45	Point wiring by using FRLSZH insulated copper conductors (along with same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose) using CONCEALED MANNER (WITH PVC CONDUIT PIPES, M.S. BOXES ETC.) POINTS				
199	R2-ME-3-45-a	Light /Fan / Ex. fan Points	250.00	Each Pt.	881.00	2,20,250.00
200	R2-ME-3-45-b	2/3 Pin Independent Plug (IP)	600.00	Each Pt.	909.00	5,45,400.00
201	R2-ME-3-45-i	15 / 5 A / 6 A Combined Power Plug Socket Point with Fuse and Indicating Lamp, One 15 Amp SP Switch	400.00	Each Pt.	1,458.00	5,83,200.00
202	R2-ME-3-45-j	5A/6A - 3/5 Pin Plug On Board	700.00	Each Pt.	193.00	1,35,100.00
203	R2-ME-3-45-k	Group Control Point Wiring 4-8 Points Controlled by One 15 A SP Switch	500.00	Each Pt.	453.00	2,26,500.00
204	R2-ME-3-45-c	Bell Point with Bell / Buzzer & 1 Bell Push	10.00	Each Pt.	1,245.00	12,450.00
205	R2-ME-3-45-d	Bell Point With Bell / Buzzer with 1 Bell Push & 1 Indicator	10.00	Each Pt.	1,307.00	13,070.00
		Point wiring by using FRLSZH insulated copper conductors (alongwith same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose) : PVC conduit concealed with modular switches & FRLSZH wires.				
206	R2-ME-3-26-b	3/5 Pin Independent Plug (IP) Concealed Manner with Modular switches & FRLSZH wires	100.00	Each Pt.	992.00	99,200.00
207	R2-ME-3-26-c	5A/6A - 3/5 Half Plug Concealed Manner with Modular switches & FRLSZH wires	710.00	Each Pt.	278.00	1,97,380.00
		16SWG GI Junction Box Complete with Earthing terminal, Interconnection & wiring				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		16 SWG G I Junction Box of various sizes For loop in loop out cables. Junction box shall have suitable no. of knock out for incoming & outgoing cables. Cables shall be terminated in 10A heavy duty connector. Cost of the connector shall be included in the cost of Junction box. Colour shade shall be RAL 7032 Siemens gray as per IS 5 (IP55).				
208	R2-ME-1-20-e	100mm x 100mm x 50mm size GI Junction box with knock out & 1 No. 5Amp. SP switch & 5 Amp. Three Pin Socket for local Isolation	200.00	Nos	131.00	26,200.00
		MAINS : - for three - single phase industrial sockets / D.B. to D.B. / panel to UPS and UPS to UPS DB				
		1.1 KV GRADE COPPER FLEXIBLE WIRE WITH SINGLE PVC INSULATED "METER LEADS" COMPLETE WITH FLEXIBLE PVC CONDUIT, END TERMINATIONS, CLIPPINGS ETC.:				
209	R2-ME-1-10-c	1.1 kV grade 2 nos. (P+N) copper conductor flexible cable of area 4.0 sq mm and 1no. (E) 2.5 sq. mm copper cable for 30/32 Amp. single phase switch.	10.00	Mtr	458.00	4,580.00
210	R2-ME-1-10-d	1.1 kV grade 4 nos. (3P+N) copper conductor flexible cable of area 6.0 sq mm and 1no. (E) 2.5 sq. mm copper cable for 30 /32 Amp. three phase switch.	250.00	Mtr	848.00	2,12,000.00
211	R2-ME-1-10-e	3(PH) nos. single core Cu PVC insulated flexible cable of 25 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for neutral of 10 Sq.mm. for 63 Amp TPNSS switch.	300.00	Mtr	1,468.00	4,40,400.00
212	R2-ME-1-10-f	3 nos. single core Cu PVC insulated flexible cable of 50 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for Neutral of 25 Sq.mm for 100/125 Amp. TPNSS switch.	70.00	Mtr	3,038.00	2,12,660.00
213	R2-ME-1-10-g	3 nos. single core Cu PVC insulated flexible cable of 95 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for neutral of 50 Sq.mm for 200 Amp TPNSS switch.	350.00	Mtr	5,791.00	20,26,850.00
214	R2-ME-1-10-h	3 nos. single core Cu PVC insulated flexible cable of 150 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for neutral of 70 Sq.mm for 250 Amp TPNSS switch.	500.00	Mtr	9,100.00	45,50,000.00
215	R2-ME-1-10-j	3 nos. single core Cu PVC insulated flexible cable of 240 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for neutral of 150 Sq.mm for 400 Amp. TPNSS switch.	250.00	Mtr	15,261.00	38,15,250.00
216	RBH18-PWD-1-1-9	Supplying & erecting I.S.I. mark Rigid P.V.C. conduit 25 mm. dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC, para no. 1.2.1	15,000.00	Mtr	132.00	19,80,000.00
217	RBH18-PWD-1-1-10	Suppling & laying Rigid PVC conduit 25 mm Dia with necessary accessories in RCC work/false ceiling/false flooring as per specification No. WG-MA/CC, para no. 1.2.1	4,000.00	Mtr	107.00	4,28,000.00
218	RBH18-PWD-1-1-11	Supplying & erecting I.S.I. mark Rigid P.V.C. conduit 32 mm. dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC, para no. 1.2.1	3,000.00	Mtr	169.00	5,07,000.00
219	RBH18-PWD-1-2-2	Supplying and erecting UPVC reinforced flexible conduit 20 mm in dia. conforming to I.S. and approved make with required number of couplings, PVC bushes, check nuts etc. complete.	150.00	Mtr	89.00	13,350.00
220	RBH18-PWD-1-2-3	Supplying and erecting UPVC reinforced flexible conduit 25 mm in dia. conforming to I.S. and approved make with required number of couplings, PVC bushes, check nuts etc. complete.	120.00	Mtr	101.00	12,120.00
221	RBH18-PWD-1-2-6	Supplying and erecting UPVC reinforced flexible conduit 50 mm in dia. conforming to I.S. and approved make with required number of couplings, PVC bushes, check nuts etc. complete.	120.00	Mtr	194.00	23,280.00
		General indoor fittings (FG-IDF)				
	R2-ME-4-5-a	1x28W, T-5 Fixtures, comprises of M.S. powder coated with end cap. The fixtures complete with high efficiency electronics ballast (THD<33%) & PF > 0.95, omplete with bright reflector & T-5 lamp.	10.00	Nos	1,919.00	19,190.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
222	R2-ME-4-34-a	1X 18W	50.00	Nos	538.00	26,900.00
223	R2-ME-4-34-b	2X 18W	180.00	Nos	1,076.00	1,93,680.00
224	R2-ME-4-32-b	SITC of Downlighter/Wall mounted LED:-9-10 W	900.00	Nos	585.00	5,26,500.00
225	R2-ME-4-32-c	SITC of Downlighter/Wall mounted LED:- 12 -13W	3,500.00	Nos	698.00	24,43,000.00
226	R2-ME-4-32-d	SITC of Downlighter/Wall mounted LED:-13-18 W	302.00	Nos	754.00	2,27,708.00
227	RBH18-PWD-2-5-8	Supplying and erecting square shaped CRCA / die-cast aluminium powder coated housing LED Panel light 150X150mm of PREMIUM RANGE suitable for upto 10 W with provision for plane front frame with translucent cover fixed to the housing complete.	300.00	Nos	1,199.00	3,59,700.00
228	RBH18-PWD-2-5-13	Supplying and erecting square shaped CRCA / die-cast aluminium powder coated housing LED Panel light 600X600mm / 300X1200mm of PREMIUM RANGE suitable for upto 45 to 48 W with provision for plane front frame with translucent cover fixed to the housing complete.	700.00	Nos	4,196.00	29,37,200.00
229	R2-ME-4-34-f	LED flexible strip light 2 wire min of 4.8W	1,000.00	Mtr	962.00	9,62,000.00
230	R2-ME-4-34-g	4W integral driver LED Steplight -	1,000.00	Nos	1,874.00	18,74,000.00
231	RBH18-PWD-2-5-15	Supplying and erecting LED concealed type foot / step light suitable upto 2 W LED including driver having fibre reinforced plastic housing as per specification no. FG-IDF/FL	365.00	Nos	575.00	2,09,875.00
232	CE5-09-002-FAE179	Occupancy sensors Supply, installtion and termintion occupancy sensors with minimum 90 degrees x 5mtr detection range	200.00	Nos	3,770.00	7,54,000.00
		LED Outdoor Fittings (FG-ODF/LED)				
233	R2-ME-4-28-a	SITC of LED Flood Light Fitting:- 150 W	10.00	Nos	11,547.00	1,15,470.00
234	R2-ME-4-28-b	SITC of LED Flood Light Fitting:- 210 W	20.00	Nos	21,734.00	4,34,680.00
		Aviation Light Fittings				
235	RBH18-ELEC-FA-58	Supplying & erecting aviation obstruction light consisting of yellow painted die-cast aluminium alloy housing, red coloured polycarbonate dome and accessories suitable for Twin light on provided bracket complete.	4.00	Nos	6,058.68	24,234.72
		Accessories for Fans (FG-FN)				
236	R2-ME-4-12-s	Fan safety rope/ Fan wire.	750.00	Nos	407.00	3,05,250.00
		FANS (SP-ME-TS-28)				
237	R2-ME-4-12-a	Ceiling fan of 600 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	10.00	Nos	2,508.00	25,080.00
238	R2-ME-4-12-b	Ceiling fan of 900 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	200.00	Nos	2,508.00	5,01,600.00
239	R2-ME-4-12-c	Ceiling fan of 1050 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	10.00	Nos	2,508.00	25,080.00
240	R2-ME-4-12-d	Ceiling fan of 1200 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	200.00	Nos	2,508.00	5,01,600.00
241	R2-ME-4-12-i	Exhaust fan of 305mm sweep, 900/1400RPM, with 750 CFM free air delivery, AC 230V/415V , 50 Hz, single phase / three phase complete with all necessary accessories for completing installation as per specification.	10.00	Nos	3,209.00	32,090.02
		LIGHTING FIXTURES, INVERTERS, FANS, WATER HEATERS.				
		Medical Examination lighting				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
241	RBH18-ELEC-FA-59	Medical examination lamp suitable for use with 60W GLS lamp. The lamp shall be provided with three arms, adjustable swiveling, heavy duty ,telescopic. Arms shall be provided with nylon nuts and firm grip. Housing shall be made up of cast Al with spun Al reflector, on/off toggle switch, bakelite lamp holder and prewired with twin core flexible copper cable . the lamp shall be suitable for use with 240V, 50Hz, Single phase AC supply and wall mounting type K-lite 3172 or equivalent.	20.00	Nos	9,523.60	1,90,472.00
		T-5 Fixtures (SP-ME-TS-20)				
242	R2-ME-4-31-c	Garden Light Luminiare Bollard Type.	70.00	Nos	6,295.00	4,40,650.00
		S' TYPE HOOK FOR CEILING FANS:				
243	R2-ME-4-15-b	S' type M.S. fan hook fabricated from suitable dia. M.S. rod for fixing ceiling fan by using pair of Anchor fastener.	800.00	Nos	229.00	1,83,200.00
		FIXING OF CEILING FANS WITH EXTENDED 1/2" G.I./ M.S. PIPE WITH SHACKLE MOUNTING ETC. WITH PAINTING:				
244	R2-ME-4-17	Fixing of Ceiling fans with MS down rod, painting etc as required for completing installation as per specification				
245	R2-ME-4-17-c	Above 1 mtr. to 1.5 Mtr.	800.00	Set	439.00	3,51,200.00
		ELECTRONIC SIREN 220V A.C. AUDIBLE RANGE:				
246	R2-ME-4-18	Electronic siren, single phase 230V AC,6000rpm , horizontal mounting , with weather shade with complete installation as per specification.				
247	R2-ME-4-18-b	Audible range 1.0 km.	1.00	Nos	6,985.00	6,985.00
248	R2-ME-4-20-b	Standard Industrial type Fly killer with M.S. body, 4 X 20W tube and approx. area covered: 2000 sq.ft.	8.00	Nos	4,992.00	39,936.00
249	R2-ME-4-34-e	LED Bulkhead fitting	250.00	Nos	1,162.00	2,90,500.00
		HIGHMAST, POLES & ACCESSORIES				
		Poles : (As per IS 2713 - Part II 1980, Swedged pole made from steel of ultimate steel tensile 410 Mpa (42 Kgf/Sq.mm.))(SP-ME-TS-13)				
250	R2-ME-10-5-e	Providing & erecting 7 m high (clear height) galvanized OCTAGONAL pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification	20.00	Nos	53,892.00	10,77,840.00
251	R2-ME-10-5-f	Providing & erecting 8 m high (clear height) galvanized OCTAGONAL pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification	10.00	Nos	66,258.00	6,62,580.00
252	R2-ME-10-5-g	Providing & erecting 9 m high (clear height) galvanized OCTAGONAL pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification	10.00	Nos	78,928.00	7,89,280.00
		Brackets				
253	R2-ME-10-6-a	Providing & erecting single arm standard bracket 1000MM long made up of 40 NB GI pipe suitable for octagonal pole of having top dia 70 MM as per specification	30.00	Nos	7,485.00	2,24,550.00
254	R2-ME-10-3-b	Providing & erecting double arm standard bracket 1000MM long made up of 40 NB GI pipe suitable for octagonal pole of having top dia 70 MM as per specification	10.00	Nos	5,861.00	58,610.00
		C.I.Junction Boxes				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		Providing, fixing and connecting weather proof pole mounting cast iron box, hinged door with locking arrangement, complete with MCB cutouts, terminal block mounting arrangement etc. Box shall be duly painted in approved manner. Cost of painting is included in cost of C.I. Box.				
255	R2-ME-10-4-b	Cast Iron Junction box complete with 2way terminal or connector block and 6A SP MCB. Box size shall not be less than 6" x 5" (150 mm x 125 mm)	20.00	Nos	4,884.00	97,680.00
256	R2-ME-10-4-c	Cast Iron Junction box complete with c 2way terminal or connector block and 6A SP MCB. Box size shall not be less than 8" x 5" (200 mm x 125 mm.)	20.00	Nos	6,056.00	1,21,120.00
		LED Outdoor Fittings (FG-ODF/LED)				
257	R2-ME-4-27-e	SITC of LED Street Light fittings:- 70-90 W	20.00	Nos	5,774.00	1,15,480.00
258	R2-ME-4-27-b	SITC of LED Street Light fittings:- 24-36 W	20.00	Nos	2,223.00	44,460.00
259	R2-ME-4-27-c	SITC of LED Street Light fittings:- 36-48 W	20.00	Nos	4,071.00	81,420.00
260	R2-ME-4-29-a	SITC of LED Post top Lantern/ Handi type- 50 W with Pole	20.00	Nos	9,343.00	1,86,860.00
261	BAH-ELEC-FA-46	SITC of Shrub uplighter 8 to 13 watt led waterproof with all accessories etc.	35.00	Nos	3,500.00	1,22,500.00
262	BAH-ELEC-FA-47	SITC of Tree uplighter 8 to 13 watt led waterproof with all accessories etc.	35.00	Nos	3,800.00	1,33,000.00
263	BAH-ELEC-RA-69	Supplying and erecting LED flexible strip light 5m length upto 25W conforming IP 65 of any colour with driver complete.	50.00	Nos	2,414.00	1,20,700.00
264	BAH-ELEC-RA-70	Supplying and erecting LED flexible strip light 5m length upto 75W conforming IP 65 of any colour with driver complete.	50.00	Nos	5,170.00	2,58,500.00
265	RBH18-ELEC-FA-60	Supply, Installation testing and commissioning of Bed head Light having 3 nos. 14W T5 + 1W LED with electronics ballast having <10% THD. The fix. Shall be of excluded Alluminium with powder coated IP-20.	250.00	Nos	6,164.24	15,41,060.00
266	RBH18-ELEC-FA-61	Supply, Installation testing and commissioning of 2x26W CFL Suspended Light fixture. TRF226EB or approved equivalent	10.00	Nos	5,137.64	51,376.40
267	RBH18-ELEC-FA-62	Supply, Installation testing and commissioning of 40W LED 2' x 2' ft, Direct - Indirect Light fixture	150.00	Nos	7,021.48	10,53,222.00
		EARTHING, LIGHTNING PROTECTION.				
		Earthing (SP-ME-TS-37)				
268	R2-ME-7-1-d	600 X 600 X 3.15 mm Copper Plate , 3000mm dip with suitable size cu strip earth pit as per IS 3043. The earth pit shall be provided with watering pipe (Class B) with wire messed funnel, 12 SWG cu wire upto chamber, disconnecting links with 600 x 600 mm (clear) RCC chamber & 3mm thick heavy duty CI chequered plate cover with hinge. Bentonite shall be provided for earth pits. Excavation, backfilling, removal of excess soil is included in the scope.	30.00	Nos	23,434.00	7,03,020.00
269	R2-ME-7-1-c	Earthing station with 600 mm x 600 mm x 6 mm galvanised iron plate & 50 mm dia. G.I. pipe, 3000mm long GI pipe (Class B or better) earth pit as per IS 3043. The earth pit shall be provided with watering pipe (Class B) with wire messed funnel, 25x3 GI strip/ / 2X8SWG G.I. wire up to chamber (wire or strip size as per fault level), disconnecting links with 600 x 600 mm (clear) RCC chamber & heavy duty 3mm thick CI chequered plate cover with hinge & stainless steel bolts. Bentonite/ Charcol & Salt shall be provided for earth pits. Excavation, back filling, removal of excess soil is included in the scope.	50.00	Nos	17,789.00	8,89,450.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		Test links				
		Supply and installation of following size Test Links with required wiring and other accessories to complete the work.				
270	R2-ME-7-3-c	25 x 3 mm Cu (length : 300 mm)	120.00	Nos	234.00	28,080.00
271	R2-ME-7-3-e	50 x 6 mm GI (length : 300 mm)	20.00	Nos	86.00	1,720.00
		Earthing Continuity Conductors				
		Supply & installation of Earth conductor of the following sizes to be cleated on wall / columns with nuts & bolts or laid in cable tray / buried in ground including cutting, drilling, tapping, jointing by welding, connecting to equipments, painting to welded portion by black bitumen paint and with all necessary GI hardware & accessories to complete the work				
272	R2-ME-7-4-a	25 x 3mm Tinned copper	295.00	Mtr	780.00	2,30,100.00
273	R2-ME-7-4-c	25 x 6mm Tinned copper	100.00	Mtr	1,568.00	1,56,800.00
274	R2-ME-7-4-d	50 x 6mm Tinned copper	350.00	Mtr	3,120.00	10,92,000.00
275	R2-ME-7-4-e	25 x 3mm GI	900.00	Mtr	49.00	44,100.00
276	R2-ME-7-4-f	25 x 6mm GI	5,500.00	Mtr	97.00	5,33,500.00
277	R2-ME-7-4-g	50 x 6mm GI	900.00	Mtr	195.00	1,75,500.00
278	R2-ME-7-4-k	Bare Copper Conductor size 8 SWG	1,240.00	Mtr	125.00	1,55,000.00
279	R2-ME-7-4-m	Bare G.I. Conductor size 8 SWG	3,500.00	Mtr	9.00	31,500.00
280	RBH18-PWD-1-3-4	Supplying & erecting mains with 2x1.5 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	150.00	Mtr	44.00	6,600.00
281	RBH18-PWD-1-3-6	Supplying & erecting mains with 2x2.5 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	120.00	Mtr	66.00	7,920.00
282	RBH18-PWD-1-3-8	Supplying & erecting mains with 2x4 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	4,000.00	Mtr	89.00	3,56,000.00
283	RBH18-PWD-1-3-10	Supplying & erecting mains with 2x6 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	170.00	Mtr	125.00	21,250.00
284	RBH18-PWD-1-3-12	Supplying & erecting mains with 2x10 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	190.00	Mtr	212.00	40,280.00
285	RBH18-PWD-1-3-20	Supplying & erecting mains with 3x10 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG	200.00	Mtr	313.00	62,600.00
286	RBH18-PWD-1-3-21	Supplying & erecting mains with 4x10 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WGMA/BW (Note : Derived from item (1-3-12))	290.00	Mtr	618.00	1,79,220.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		CABLES, EXCAVATION, G.I. CABLE TRAYS & ACCESSORIES, CABLE JOINTS, CABLE PROTECTION PIPE.				
		Providing & laying Hume pipe across road or below the plinth beams and buried cable protection				
		Supply and laying of Heavy duty RCC Hume pipe for road crossing, below plinth beam of following size as diameter.				
287	R2-ME-2-19-b	150mm Dia.	100.00	Mtr	611.00	61,100.00
288	R2-ME-2-19-d	300mm Dia.	100.00	Mtr	1,113.00	1,11,300.00
		Supplying & laying I.S.I. mark 'B' class GI Pipe for surface/ under ground cable protection				
289	R2-ME-2-21-c	25 mm dia.	10.00	Mtr	381.00	3,810.00
290	R2-ME-2-21-e	38/40 mm dia.	10.00	Mtr	553.00	5,530.00
291	R2-ME-2-21-f	50 mm dia.	50.00	Mtr	765.00	38,250.00
292	R2-ME-2-21-g	65 mm dia.	80.00	Mtr	969.00	77,520.00
293	R2-ME-2-21-h	80 mm dia.	80.00	Mtr	1,245.00	99,600.00
294	R2-ME-2-21-i	100 mm dia.	100.00	Mtr	1,775.00	1,77,500.00
		Supply & Laying of double wall corrugated (DWC) pipes of HDPE for underground cable protection				
	R2-ME-2-22	Supply & Laying of double wall corrugated (DWC) pipes of HDPE for underground cable protection as per IS 14930 Part II. With necessary connecting socket/couplings, tees of some material at required depth up to 900 mm below road ground surface. backfilling of with light ramming is included in the scope.				
295	R2-ME-2-22-a	50 mm OD / 38 mm I.D.	440.00	Mtr	226.00	99,440.00
296	R2-ME-2-22-g	145 mm OD / 126 mm I.D.	75.00	Mtr	686.00	51,450.00
297	R2-ME-2-22-j	200 mm OD / 175 mm I.D.	75.00	Mtr	1,108.00	83,100.00
		Sheet Moulding compound (SMC) Junction Box, for Outdoor Use				
298	R2-ME-1-21-a	SMCJB - 1414, Hinged cover, Size 170 x 170 x 105mm	100.00	Nos	1,253.00	1,25,300.00
299	RBH18-PWD-6-1-20	Supplying and erecting Iron work consisting of Various sections of MS and including Plates, Chequered Plates, Rods, Bars, MS pipes, etc. for panel board or any other purposes complete with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority	750.00	KG	135.00	1,01,250.00
		Lightning Protection System				
300	BAH-ELEC-FA-48	Supply, Installation testing and commissioning of Vertical Aluminum Air terminal of Length 1000 mm along with the round gun metal base plate and 3+2 mtr Gi pipe to make it of 5 mtr.	3.00	Nos	10,580.00	31,740.00
301	BAH-ELEC-FA-49	Supply, Installation testing and commissioning of Vertical aluminium Lighting Arrester of 16 mm dia, 1000 mm long with Gun Metal base plate	12.00	Nos	5,500.00	66,000.00
302	BAH-ELEC-FA-50	Supply, Installation testing and commissioning of 8 mm round aluminium conductor for horizontal lightning protection - run in roof.	500.00	Mtr	200.00	1,00,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
303	BAH-ELEC-FA-51	Supply, Installation testing and commissioning of roof conductor holder for 8 mm round aluminium conductor made of Gun Metal for horizontal installation. The distance between each holder should be min of 1 mtr.	500.00	Nos	150.00	75,000.00
304	BAH-ELEC-FA-52	Supply, Installation testing and commissioning of T connector for connecting of 8 mm Al round conductor . The connector should be of Gun Metal with SS nuts and bolt.	80.00	Nos	425.00	34,000.00
305	BAH-ELEC-FA-53	Supply, Installation testing and commissioning of Cross connector for connecting of 8 mm Al round conductor . The connector should be of Gun Metal with SS nuts and bolt.	25.00	Nos	435.00	10,875.00
306	BAH-ELEC-FA-54	Supply, Installation testing and commissioning of Expansion piece along with connector to compensate the expansion of round 8 mm Al conductor when temperature variation . Connection should be in every 20 mtr.	25.00	Nos	490.00	12,250.00
307	BAH-ELEC-FA-55	Supply, Installation testing and commissioning of GLUE-is used to fix roof conductor holder on roof	80.00	Nos	350.00	28,000.00
308	BAH-ELEC-FA-56	Supply, Installation testing and commissioning of 8 mm round aluminium conductor as a down conductor mounted in the surface of wall which will carry the lightning current to earth pit.	800.00	Mtr	135.00	1,08,000.00
309	BAH-ELEC-FA-57	Supply, Installation testing and commissioning of Down conductor holder for 8 mm round aluminium conductor of min distance between the wall to the conductor will be of 85 mm. The distance between each holder should be min of 1 mtr.	800.00	Nos	145.00	1,16,000.00
310	BAH-ELEC-FA-58	Supply, Installation testing and commissioning of straight connector for connecting of 8 mm Al round conductor . The connector should be of Gun	10.00	Nos	390.00	3,900.00
311	BAH-ELEC-FA-59	Supply, Installation testing and commissioning of 6 digit lightning strike counter.	1.00	Nos	7,300.00	7,300.00
312	BAH-ELEC-FA-60	Supply, Installation testing and commissioning of Test Joint Point for 8 mm round aluminium conductor , the size should be of 25 x 3 x 150 mm copper in ABS boxes.	30.00	Nos	3,450.00	1,03,500.00
313	BAH-ELEC-FA-61	Supply, Installation testing and commissioning of UL LISTED low carbon high tensile steel rod with copper coating of min 254 micron JK Chemrode -JK0110 CBR the dia should be 25.4 mm with length of 10 feet (3000 mm) . The rod shall be as per IEC 62561-2 and approved by UL 467. The rod shall be tested from CPRI lab for current discharge 50kA peak. - JK0110CBR The Chemrode shall be surrounded with 25 kg (2 bag) of Earth enhance materiel JK Reslow according to IEC 62561-7 and the Chemical resistance value shall not increase more then 0.067 Ωm along with earth pit chamber made up polyplastic. Size of -254x330x260 MM earth pit chamber cover should be tested and certified for 9tonne load bearing capacity from any central government lab (national test house Gaziabad	20.00	Set	8,350.00	1,67,000.00
314	BAH-ELEC-FA-62	Supply, Installation testing and commissioning of GI STRIP (25X6 MM) - For earthing interconnection	300.00	Mtr	180.00	54,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
315	BAH-ELEC-FA-63	LIGHTNING PROTECTION FOR INCOMING POWERLINE. Supply, Installation testing and commissioning of Power lightning protection device as per IEC 61643-1: Type 1/class I type at the main distribution panel board after main switch cut off in parallel to the load to protect the lightning impulse current upto 100 KA comer through the external overhead lines from transformer out put to with the following technical parameters. 03 numbers of Type 1/Class I SPD of encapsulated multiple spark gap technology to be connected between each line to neutral with the following parameter of 50KA (10/350 micro sec)/phase with follow current interrupting rating of 25 KA(Ifi),voltage protection level <1.3 KV & 01 no. type 1 / class I SPD of encapsulated spark gap technology to be connected between neutral and earth with the following parameter of I _{max} 100 KA (10/350 micro sec) with follow current interrupting rating of 100 Arms(Ifi), voltage protection level <1.3 KV . The surge protection device are recommended to be places incoming power line i.e as near to the main switch w/o enclosure ,	1.00	Set	19,000.00	19,000.00
UPS						
316	RBH18-ELEC-FA-64	Supply, Installation, testing and commissioning of three phase input and three phase output online IGBT ups with 0.9 output p.f. with 30 minutes battery back up for UPS power. - 250 KVA	3.00	Nos	41,87,000.28	1,25,61,000.84
317	RBH18-ELEC-FA-65	Supply, Installation, testing and commissioning of three phase input and three phase output online IGBT ups with 0.9 output p.f. with 30 minutes battery back up for UPS power. - 40 KVA	2.00	Nos	12,47,191.40	24,94,382.80
318	R2-ME-4-11-h	Inverter of 20KVA ,single phase input and output with Tubular Battery(12X20) 200 AH Duration 4 Hrs.	1.00	Nos	6,92,287.00	6,92,287.00
319	RBH18-ELEC-FA-66	Supply, installation, transportation, loading, unloading, shifting to final location 1010kva d.g. set with acoustic canopy, inside canopy mounted diesel tanks, exhaust piping till outside canopy, fuel piping from fuel day tank to d.g. set, batteries, battery charger and battery carging and first fill of lube oil. necessary alternator adantor box for cable connection shall be provided	3.00	Nos	1,10,02,009.56	3,30,06,028.68
320	RBH18-ELEC-FA-67	Supply, installation, testing and commissioning of DG synchronising panel for 3 nos 1010 kva sets with 3 nos. of incoming feeder shall of 2000A TPN ACB, MDO, 50ka + 2 nos 2000A FPACB, 50ka as bucoupler. Panel shall have - 3 no 2000 FP ACB, MDO, 50ka +1 nos 1600A ACB, MDO, 50ka as outgoing. All the ACBs shall be with microprocessor releases. All meters etc shall be provided as per the specs of the tender panel SLD. Panel shall have ON-OFF signal from 4 nos. ATS and DG set panel shall have necessary PLC for the same. control cabiling from DG to Dg sycn. panel - app 40meters single run and DG sycn. panel to ATS - app 120mtr single run shall be DG supplires scope. Passing of Gensets from all concerned authorities shall be DG set vendor scope along with meters and C.T. sealing for each set.	1.00	Nos	63,69,584.36	63,69,584.36

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
321	RBH18-ELEC-FA-68	SITC of DG set Exhaust piping with Necessary cladding / Clamping / Insulation etc. Complete. Exhaust pipes shall be run horizontally till stack & then vertically up till 33 mtr from ground. stack design shall be as per vendor subject to clients structural consultant approval. Foundation for stack shall be carried out by DG set Vendor as per Approval from Client / Clients strictural consultant. stack shall be from MS Angles / channels / flats etc. which shall be applied with Anti rust treatment - 2 coats + paint - minimum 2 coats. stack shall be earthed. Stack-1 shall comprise of following Pipe from 1010KVA DG set-1 - Horizontal run : 35mtr + Vertical Pipe from 1010KVA DG set-2 - Horizontal run : 20mtr + Vertical Pipe from 1010KVA DG set-3 - Horizontal	1.00	Set	66,90,113.24	66,90,113.24
322	KSS-EL-138	Supply of 59.590 KWp Grid Connected Roof-top Solar Photovoltaic System based on heterojunction technology solar PV module as per the scope defined in the tender specifications.(185 Panel of 325W each).Complete as required .	1.00	Set	59,44,103.00	59,44,103.00
		Installation, Commissioning & Testing of 59.590 KWp Grid Connected Rooftop Solar Photovoltaic System based on HIT solar PV module - including all expenses (to be borne by bidder) e.g. Air Fare, Local Transport, accommodation etc. with Designing, Supplying, Fabricating and installation of MS fabricated structure / support complete with welding, grouting and painting etc.complete with all necessary hardware and as per the instruction of the Engineer in charge / Architect /Consultant. Complete as required .				
323	BAH-ELEC-RA-71	Supplying , erecting, testing & commissioning SF 6 Insulated 22kV,630A, 16kA/3sec, 4 way outdoor, extensible motorised SCADA compatible RMU as per electric supply company specification consisting of 2 nos. feeder with load break switch and 2 nos. feederwith VCB as per specification no. SW-HTS / RMU SCADA (2LBS +2VCB)	1.00	Nos	10,58,893.00	10,58,893.00
324	BAH-ELEC-RA-72	Supplying, erecting, testing, commissioning 22 KV HT metering cubical (compact type) approved by MSEDCL/licensee fabricated with 2mm.(14 SWG) M.S. sheets with supporting angle and channel, painted with powder coating / epoxy paint of required shade copper bus bar size 25x6 mm electronic security lock and heavy duty mechanical lock, with counter meter for measuring no of times the opening of doors, top side cover (CT,PT cover) interlock with meter doors, epoxy coated 3 nos CT having required ratio between 50/5 A to 100/5 A, VA10, class 0.2S, 22000/V3/110/V3 VA 50, class 0.2 epoxy terminal block suitable for provided trivector meter, and provision for incoming and outgoing cables etc. complete duly tested by licensee with necessary test certificates and erected on provided plinth/ cc foundation	1.00	Nos	2,01,228.00	2,01,228.00
TOTAL AMOUNT HT & LT ELECTRICAL WORKS (In Rs.)						29,40,17,366.14
Say						29,40,17,367.00

MUNICIPAL CORPORATION OF GREATER MUMBAI

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES ELEVATOR WORKS - HOSPITAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1	FAIR ITEM	<p>SITC of Electric Traction Passenger Lift with</p> <ul style="list-style-type: none"> · Rated capacity :- 18 Passenger/1224Kg · Floors :- G+7 floor (8 Stops/8 Landings) · Travel :- 21 to 29.4 mtrs · Location of Lift Machine:- MR · Rated speed :- 1.5mps VS · Car/Landing door clear opening of 1100 mm wide x 2000 mm high · Clear Car size ofmm wide xmm deep x 2250mm high · Lift shaft available having clear size ofmm wide xmm deep,mm Pit depth,mm Overhead. · Doors type :- COPO/TOPO Doors with frame made from SS 304 grade solid(non-cladded) sheet of 1.5mm thick in hairline finish for car and all landing doors with SS door architraves/frames The lift doors shall have minimum 1hour fire rating (with submission of necessary valid test certificate issued by NABL accredited or Independent Test laboratory). · Lift car enclosure made from SS 304 grade solid (non-cladded) sheet of 1.5mm, thick with hairline finish with frame made from MS girders, bracing of adequate size with minimum safety factor of 5, with Toe Guard Apron, with necessary false ceiling with adequate LED lights, blower/fan for ventilation & SS chequered plate flooring, handrails, mirror, emergency light etc. The lift car interior design shall be done as per the directions of engineer in charge. · COP with SS face plate having metallic push buttons with Braille code & luminous indicator around button with FPI, scrolling UP/DN LED indicator & with / without attendant key switch, OWD with audio-visual alarm, VAS in Marathi, Hindi & English with intercom system with telephone instrument in Lift car, LMR & FCC/ground floor. · LOP with SS face plate having recess/surface push button box for all landings with scrolling UP/DN LED indicator having metallic push buttons with Braille code & luminous indicator around button with CPI, Lift car arrival & next travel direction audio-visual indication at all landings. · Lift controller of simplex full collective based on microprocessor/ PLC with VVVF Drive having closed loop control system with IRMS compatible having necessary part. The controller shall have necessary protections 	4.00	Per Unit	29,10,914.00	1,16,43,656.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		<p>control system, with I/Os compatible having necessary ports. The controller shall have necessary protections such as overcurrent, overvoltage, over speed, overheat for all devices including lift motor and travel direction protection, protection for phase loss at input or output etc., various operation modes such as maintenance, change direction by attendant, full load bypass, VIP call operation, self levelling operation, call cancel facility, auto return to home landing, fireman evacuation operation, earthquake operation, door open/close operation from COP etc. The system can record information for inimum 30 latest faults, with real-time clock management and handheld keypad with LCD screen for view and setting of parameters, The control panel duly wired with proper size & strength, copper wire for power & control circuit, with provision for addition of floor/control card & allied accessories control panel having enclosure of 1.5mm CRCA sheet with powder coating with IP54 Protection class.</p> <ul style="list-style-type: none"> · ARD complete with necessary SMF VRLA batteries. · Fireman controller having fireman switch at fire Landing. · CCTV surveillance system comprises of 2nos minimum 2.0MP FHD IP based vandal proof Dome camera in lift car & in LMR/inside lift shaft top aimed on Lift machinery & controller with NVR kept in LMR/FCC with HDR data backup for min. 90 days with min. 20" FHD TV monitor, to be kept in FCC/LMR as directed by Engineer In Charge. · Lift Machine of Gearless PMSM of suitable kW with duty cycle of minimum 120 starts/hr (with submission of necessary valid test certificate issued by NABL accredited or Independent test laboratory), with Traction pulley, OSG, electromagnetic brakes, entire assembly mounted on adequate size girders duly fixed on LMR floor/ shaft walls complete with main/diverter traction sheaves, suspension wire ropes/belts of adequate size & strength. · Other mechanical parts such as 'T' section adequate size guide rails for car & counter weight with brackets 				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
2	FAIR ITEM	For Lift having 1200mm wide x 2000mm high clear entrance in 1.5mm thick SS 304 grade solid(non-cladded) landing door [Two panel], this includes all necessary accessories like LOP's with UP/DN buttons-arrows-indicators, extension of guide rails, shaft wiring with trunking, travelling cables, main hoisting ropes/belts, & OSG rope, landing doors with all accessories etc. complete for the safe functioning of lift installation.	16.00	Floors	1,67,645.00	26,82,320.00
3	FAIR ITEM	<p>SITC of Electric Traction Passenger cum Stretcher/Hospital Lift with</p> <ul style="list-style-type: none"> · Rated capacity :- 20 Passenger/1360Kg · Floors :- G+7 floor (8 Stops/8 Landings) · Travel :- 21 to 29.4 mtrs · Location of Lift Machine:- MR/MRL · Rated speed :- 1.5mps VS · Car/Landing door clear opening of 1100/1200 mm wide x 2000 mm high · Clear Car size ofmm wide xmm deep x 2250mm high · Lift shaft available having clear size ofmm wide xmm deep,mm Pit depth,mm Overhead. · Doors type :- COPO/TOPO Doors with frame made from SS 304 grade solid(non-cladded) sheet of 1.5mm thick in hairline finish for car and all landing doors with SS door architraves/frames The lift doors shall have minimum 1hour fire rating (with submission of necessary valid test certificate issued by NABL accredited or Independent test laboratory). · Lift car enclosure made from SS 304 grade solid (non-cladded) sheet of 1.5mm, thick with hairline finish with frame made from MS girders, bracing of adequate size with minimum safety factor of 5, with Toe Guard Apron, with necessary false ceiling with adequate LED lights, blower/fan for ventilation & SS chequered plate flooring, handrails, mirror, emergency light etc. The lift car interior design shall be done as per the directions of engineer in charge. · COP with SS face plate having metallic push buttons with Braille code & luminous indicator around button with FPI, scrolling UP/DN LED indicator & with / without attendant key switch, OWD with audio-visual alarm, VAS in Marathi, Hindi & English with intercom system with telephone instrument in Lift car, LMR & FCC/ground floor. · LOP with SS face plate having recess/surface push button box for all landings with scrolling UP/DN LED indicator having metallic push buttons with Braille code & luminous indicator around button with CPI, Lift car arrival & next travel direction audio-visual indication at all landings. 	6.00	Per Unit	30,95,696.00	1,85,74,176.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
4	FAIR ITEM	For Lift having 1200mm wide x 2000mm high clear entrance in 1.5mm thick SS 304 grade solid(non-cladded) landing door [Two panel], this includes all necessary accessories like LOP's with UP/DN buttons-arrows-indicators, extension of guide rails, shaft wiring with trunking, travelling cables, main hoisting ropes/belts, & OSG rope, landing doors with all accessories etc. complete for the safe functioning of lift installation.	24.00	Floors	1,67,645.00	40,23,480.00
		<p>SITC of Electric Traction Passenger Lift with</p> <ul style="list-style-type: none"> · Rated capacity :- 16 Passenger/1088Kg · Floors :- G+7 floor (8 Stops/8 Landings) · Travel :- 21 to 29.4 mtrs · Location of Lift Machine:- MR/MRL · Rated speed :- 1.5mps VS · Car/Landing door clear opening of 1000mm wide x 2000 mm high · Clear Car size ofmm wide xmm deep x 2250mm high · Lift shaft available having clear size ofmm wide xmm deep,mm Pit depth,mm Overhead. · Doors type :- COPO/TOPO Doors with frame made from SS 304 grade solid(non-cladded) sheet of 1.5mm thick in hairline finish for car and all landing doors with SS door architraves/frames The lift doors shall have minimum 1hour fire rating (with submission of necessary valid test certificate issued by NABL accredited or Independent test laboratory). · Lift car enclosure made from SS 304 grade solid (non-cladded) sheet of 1.5mm, thick with hairline finish with frame made from MS girders, bracing of adequate size with minimum safety factor of 5, with Toe Guard Apron, with necessary false ceiling with adequate LED lights, blower/fan for ventilation & SS chequered plate flooring, handrails, mirror, emergency light etc. The lift car interior design shall be done as per the directions of engineer in charge. · COP with SS face plate having metallic push buttons with Braille code & luminous indicator around button with FPI, scrolling UP/DN LED indicator & with / without attendant key switch, OWD with audio-visual alarm, VAS in Marathi, Hindi & English with intercom system with telephone instrument in Lift car, LMR & FCC/ground floor. · LOP with SS face plate having recess/surface push button box for all landings with scrolling UP/DN LED indicator having metallic push buttons with Braille code & luminous indicator around button with CPI, Lift car arrival & next travel direction audio-visual indication at all landings. · Lift controller of simplex full collective based on microprocessor/ PLC with VVVF Drive having closed loop control system, with IBMS compatible having necessary port. The controller shall have necessary Protections such as overcurrent, overvoltage, over speed, overheat for all devices including lift motor 	2.00	Nos	27,83,302.00	55,66,604.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		<p>such as overcurrent, overvoltage, over speed, overheat for all devices including lift motor, and travel direction protection, protection for phase loss at input or output etc. ,various operation modes such as maintenance, change direction by attendant, full load bypass, VIP call operation, self levelling operation, call cancel facility, auto return to home landing, fireman evacuation operation, earthquake operation, door open/close operation from COP etc. The system can record information for minimum 30 latest faults, with real-time clock management and handheld keypad with LCD screen for view and setting of parameters, The control panel duly wired with proper size & strength, copper wire for power & control circuit, with provision for addition of floor/control card & allied accessories control panel having enclosure of 1.5mm CRCA sheet with powder coating with IP54 Protection class.</p> <ul style="list-style-type: none"> · ARD complete with necessary SMF VRLA batteries. · Fireman controller having fireman switch at fire Landing. · CCTV surveillance system comprises of 2 nos minimum 2.0MP FHD IP based vandal proof Dome camera in lift car & in LMR/inside lift shaft top aimed on Lift machinery & controller with NVR kept in LMR/FCC with HDR data backup for min. 90 days with min. 20" FHD TV monitor, to be kept in FCC/LMR as directed by Engineer In Charge. · Lift Machine of Gearless PMSM of suitable kW with duty cycle of minimum 120 starts/hr (with submission of necessary valid test certificate issued by NABL accredited or Independent test laboratory), with Traction pulley, OSG, electromagnetic brakes, entire assembly mounted on adequate size girders duly fixed on LMR floor/ shaft walls complete with main/diverter traction sheaves, suspension wire ropes/belts of adequate size & strength. · Other mechanical parts such as 'T' section adequate size guide rails for car & counter weight with brackets fasteners, counter weight frame with necessary blocks, buffers with necessary support arrangement, MS pit ladder etc. erected with necessary steel work. · Minor civil work such as alteration work if any necessary for erection of landing door frames and it's accessories e.g. sill, header, hole pass etc complete with plaster finish, civil work for erection buffers, erection of lift machinery, adequate size core cuts if required & scaffolding for erecting guide rails, providing and 				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		fixing steel girders/RCC work having adequate strength for mounting and hoisting lift machine etc. complete as per specification no. LFT. · General: - Job includes entire procedure of obtaining all necessary erection permissions & "License to Work the Lift" from Electrical Inspector(Lifts) with submission to the Engineer In Charge. · The above rate includes Fully Comprehensive AMC for one year from the date of commissioning.				
5	FAIR ITEM	For Lift having 1200mm wide x 2000mm high clear entrance in 1.5mm thick SS 304 grade solid(non-cladded) landing door [Two panel], this includes all necessary accessories like LOP's with UP/DN buttons-arrows-indicators, extension of guide rails, shaft wiring with trunking, travelling cables, main hoisting ropes/belts, & OSG rope, landing doors with all accessories etc. complete for the safe functioning of lift installation.	16.00	Floors	1,67,645.00	26,82,320.00
		For additional 2MP Camera along with necessary accessories at Home Landing, add as given.	12.00	Floors	13,460.00	1,61,520.00
TOTAL AMOUNT ELEVATORS (In Rs)						4,53,34,076.00

MUNICIPAL CORPORATION OF GREATER MUMBAI
PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS
On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES AUDIO SYSTEM WORKS - HOSPITAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1	HBTMC/AUDIO/FA-6	Supply, Installation, Testing & Commissioning of Class D Dual zone amplifier with output power of upto 2x120W or better @ 70/100V. frequency response of 55 Hz - 20 kHz (+0/-3 dB, @ 1 W reference 1 kHz); THD <0.3% at rated power. Channel Separation ≤ -60 dBV (below rated power, 1 kHz), Dynamic range > 88 dB.	5	Nos	2,11,925.00	10,59,625.00
2	HBTMC/AUDIO/FA-7	Supply, Installation, Testing & Commissioning of Amplifier: Class D Zone amplifier with power as 1 X 90 W @ 70/100V; frequency response of 60Hz to 20kHz; THD <1%; 1 unbalanced AUX input, 1 balanced page input, 1 balanced mic/line input, 2 unbalanced line; Dynamic range is of 88 dB; built in loudspaker EQ.	1	Nos	1,12,908.00	1,12,908.00
3	HBTMC/AUDIO/FA-8	Supply, Installation, Testing & Commissioning of Class D 1/2 RU 2 Channel ENERGY STAR amplifier / Stereo operation 60 watts into 8 Ω & 4 Ω, Bridged operation 200 watts into 8Ω & 4Ω, and 250 watts into 70v and 100v / 100-240 VAC Operation	20	Nos	1,17,346.00	23,46,920.00
4	HBTMC/AUDIO/FA-9	Supply, Installation, Testing & Commissioning of Class D 1/2 RU 2 Channel ENERGY STAR amplifier / Stereo Operation 200 watts into 8 Ω & 4 Ω, Bridged operation 400 watts into 8Ω & 4Ω, and 350 watts into 70v and 100v / 100-240 VAC Operation	5	Nos	1,17,344.00	5,86,720.00
5	HBTMC/AUDIO/FA-10	Supply, Installation, testing and commissioning of 2000W Amplifier using FAST channel combining technology. 4 channels, 500 watts/ch at 8Ω, 700 watts/ch at 4Ω,625 watts/ch at 2Ω, with XLR and NL4 connectors.	1	Nos	2,49,241.00	2,49,241.00
6	HBTMC/AUDIO/FA-15	Supply, Testing , Installation and commissioning of 4 channel Power amplifiers for PA, Monitors and Other speakers; Installation specific four channel amplifier Maximum output power 4 x 1600 W into 4 Ω 5 freely assignable GPIOs (General Purpose Input Output) + General fault Sampling rate96 kHz/27 Bit ADC/24 Bit DAC Integrated DSP incorporates comprehensive loudspeaker management, switchable filtering functions as well as user definable equalization and delay capabilities.	5	Nos	15,68,454.00	78,42,270.00
7	HBTMC/AUDIO/FA-1	Supply, Installation, Testing & Commissioning of Ceiling mount speaker with frequency respose of 95Hz - 17kHz; nominal dispersion of 140 degree conical; Power handling 16W @ 8 Ohms, Transformer tapping (70/100V) : 1W, 2W, 4W, 8W, 16W), sensitivity 84 db SPL; and Max SPL of 96 db or better SPL with powder coated steel grille.	50	Nos	26,399.00	13,19,950.00
8	HBTMC/AUDIO/FA-2	Supply, Installation, Testing & Commissioning of Ceiling Speakers; Effective frequency range1 70 – 16 kHz or better Rated noise power / voltage2 16 watts / 11.3 volts (rms) Broad-band sensitivity3 89 dB SPL Coverage angle (-6 dB) 140° (500 Hz - 5 kHz) Maximum continuous SPL4 101 dB or better ; Maximum peak SPL4 107 dB Rated impedance 8 ohms Transformer taps 70 V: 16, 8, 4, 2, 1 watts and 8 ohm bypass 100V: 16, 8, 4, 2, watts and 8 ohm bypass	300	Nos	20,116.00	60,34,800.00

9	HBTMC/AUDIO/FA-3	Supply, Installation, testing and commissioning of Stackable Wall Mount multi driver (8 or better) full range Column Array loudspeaker with free field frequency range (-10dB) of 60Hz to 16kHz; RMS continuous power handling of 150W better; Nominal dispersion of 120 H X 20 V; full range Sensitivity of 87 Db SPL; Max SPL of 109 dB SPL (115dB peak); Nominal Impedance of 8 ohms; Rugged enclosure with powder coated steel grille. Optional 70/100V OEM transformer module with tap settings of 100/50W shall be available.	10	Nos	4,19,286.00	41,92,860.00
10	HBTMC/AUDIO/FA-5	Supply, Testing , Installation and commissioning of Compact LineArray Speaker with 2 x 6.5"/1.4" drivers monitors with Frequency response (-5 dB standard) 55 Hz - 20 kHz and 15" driver with ferrite magnet coaxial 1.4" exit compression driver passive crossover network Dispersion 75° (h x v) SPLmax 131 dB 5 years warranty including all parts.	10	Nos	7,85,476.00	78,54,760.00
11	HBTMC/AUDIO/FA-12	Supply, Testing , Installation and commissioning of Point Source Speaker with 2 x 8"/1.4" specific four channel amplifier Maximum output power 4 x 1600 W into 4 Ω 5 freely assignable GPIOs (General Purpose Input Output) + General fault Sampling rate 96 kHz/27 Bit ADC/24 Bit DAC Integrated DSP incorporates comprehensive loudspeaker management, switchable filtering functions as well as user definable equalization and delay capabilities.	1	Nos	9,66,548.00	9,66,548.00
12	HBTMC/AUDIO/FA-14	Supply, Testing , Installation and commissioning of Stage monitor with 15" & 1.4" ;Installation and commissioning of monitors with Frequency response (-5 dB standard) 55 Hz - 20 kHz and 15" driver with ferrite magnet coaxial 1.4" exit compression driver passive crossover network Dispersion 75° (h x v) SPLmax 131 dB 5 years warranty including all parts.	5	Nos	6,49,361.00	32,46,805.00
13	BTMC-AUDIO-3	S/I/T/C of Speakers :Power capacity:50w(HF),120W(MF),200(LF). Frequency Responce: 63hz -20khz , Crossover: passive crossover, Impedance : 4 Ohm, cabinet Material: russian brich Plywood, horn material:russian brich Plywood, Weight:19.0kg	10	Nos	79,995.00	7,99,950.00
14	HBTMC/AUDIO/FA-4	Supply, Installation, Testing & Commissioning of Portable System.	1	Nos	5,33,892.00	5,33,892.00
15	HBTMC/AUDIO/FA-13	Supply, Testing , Installation and commissioning of Flyable Cardioid Subwoofer with 18" driver Directional pattern: Cardioid Frequency response 20 Hz - 20 kHz Effective frequency range, ±2 dB, Near field 2-3 cm (0.8 - 1.2 in) 100 Hz - 20 kHz (4 - 6 dB soft boost at 15 kHz) Distortion, THD < 1% - CORE 134 dB SPL RMS, 137 dB SPL peak Dynamic range - CORE Typ. 111 dB With suitable adaptor for Wireless bodypack	2	Nos	13,57,412.00	27,14,824.00
16	HBTMC/AUDIO/FA-16	Supply, Installation, Testing & Commissioning of Ceiling microphone array with patented automatic speaker position detection and dynamic beamforming for best speech intelligibility Analog and digital (Dante™) audio outputs for easy connectivity to video and audio conference systems Configuration and monitoring via Sennheiser's unique Control Cockpit software Open API for media and camera control applications 802.1X network configuration via SSH Several installation options via suspension kit, flushmount or surface bracket Certified for Microsoft Teams Rooms when deployed with Microsoft-certified DSPs	2	Nos	9,04,374.00	18,08,748.00

17	HBTMC/AUDIO/FA-17	SITC of wireless headworn microphone of Modulation wideband FM Frequency ranges 548-572 MHz, 766-790 MHz Switching bandwidth up to 24 MHz Frequencies 8 frequency banks, each with up to 10 factory-preset channels Signal-to-noise ratio ≥ 103 dBA THD $\leq 0.9\%$ Transmitter sychronization 2.4 GHz, Receiver principle double superheterodyne Diversity principle antenna switching diversity via internal Antennas Sensitivity (at peak deviation) $< 3 \mu\text{V}$ at 52 dB(A)rms S/N, AF frequency response 50 to 16,000 Hz (-3 dB) Audio adjustment range 45 dB, adjustable in 5-dB steps. Transmitter RF output power 10 mW AF frequency response Line: 50-16,000 Hz Mic: 50-16,000 Hz Adjustment range of transmitter sensitivity 0 to -30 dB, adjustable in 10 dB steps Transducer principle condenser, pre-polarized Sensitivity 20 mV/Pa Pick-up pattern CARDIOID.OEM should have authorized service centre	25	Nos	60,708.00	15,17,700.00
18	HBTMC/AUDIO/FA-18	Supply, Installation, Testing & Commissioning of wireless hand held microphone of Modulation wideband FM Frequency ranges : 548-572 MHz, 766-790 MHz Switching bandwidth. up to 24 MHz Frequencies adjustable in 25-kHz steps 8 frequency banks, each with up to 12 factory-preset channels, Signal-to-noise ratio ≥ 103 dBA THD $\leq 0.9\%$ Transmitter sychronization 2.4 GHz, Receiver principle - double superheterodyne, Diversity principle True Diversity Sensitivity (at peak deviation) $< 3 \mu\text{V}$ at 52 dB(A)rms S/N AF frequency response 50 to 16,000 Hz (-3 dB) Audio adjustment range 40 dB, adjustable in 5- dB steps Squelch adjustable from 3 dB μV to 28 dB μV Line/Mic level .20 dB, switchable RF output power 10 mW, AF frequency response 80- 16,000 Hz Microphone type dynamic, Pick-up pattern cardioid Input sensitivity (caspsule) 1.5 mV/Pa, SKM 865: 1.8 mV/Pa Adjustment	2	Nos	79,391.00	1,58,782.00
19	HBTMC/AUDIO/FA-19	Supply, Installation, Testing & Commissioning of wireless handheld microphone of Modulation wideband FM Frequency ranges 548-572 MHz, 766-790 MHz Switching bandwidth up to 24 MHz Frequencies 8 frequency banks, each with up to 10 factory-preset channels Signal-to- noise ratio ≥ 103 dBA THD $\leq 0.9\%$ Transmitter sychronization 2.4 GHz, Receiver principle double superheterodyne Diversity principle antenna switching diversity via internal antennas Sensitivity (at peak deviation) $< 3 \mu\text{V}$ at 52 dB(A)rms S/N AF frequency response 50 to 16,000 Hz (-3 dB) Audio adjustment range 45 dB, adjustable in 5-dB steps Microphone RF output power 10 mW AF frequency response 80-16,000 Hz Microphone type dynamic Pick-up pattern cardioid Input sensitivity (caspsule) 1.5 mV / Pa Adjustment range of transmitter sensitivity 0 to -30 dB, adjustable in 10 dB steps.OEM should have authorized service	60	Nos	45,477.00	27,28,620.00
20	HBTMC/AUDIO/FA-20	Supply, Installation, Testing & Commissioning of wireless headworn microphone of Modulation wideband FM Frequency ranges A: 548-572 MHz, GB: 606-630 MHzB: 614-638 MHz, C: 766-790 MHzD: 794-806 MHz,E: 821-832 MHz, 863-865 MHzK: 925-937.5 MHz Switching bandwidth up to 24 MHzFrequencies 8 frequency banks, each with up to 12 factory-preset channels Signal-to-noise ratio ≥ 103 dBA THD $\leq 0.9\%$ Transmitter sychronization 2.4 GHz, Low Power OQPSK (only active during synchronization) Receiver principle double superheterodyne Diversity principle True Diversity Sensitivity (at peak deviation) $< 3 \mu\text{V}$ at 52 dB(A)rms S/N AF frequency response 50 to 16,000 Hz (-3 dB) Max. AF output voltage (at peak deviation, 1 kHz AF) 1/4" (6.3 mm) jack socket (unbalanced): +6 dBu, XLR socket (balanced): +12 dBu Audio adjustment range 40 dB, adjustable in 5-dB steps Squelch adjustable	1	Nos	88,491.00	88,491.00

21	HBTMC/AUDIO/FA-21	SITC of pre-polarized condenser gooseneck microphone with an overall length of minimum 450 mm and with XLR3M-type connector at its base, which shall offer radio frequency interference (RFI) shielding against intermodulation from wireless equipment or devices, cardioid microphone capsule with uniform 120° angle of acceptance (-3dB) or better, frequency response of 50 Hz to 20,000 Hz or better and sound input levels handling capability of minimum 130 dBspl, nominal equivalent noise level of 26 Dba or better and output shall be low impedance balanced (<100 ohms) with current consumption shall be 3 mA or better. table stand for connecting and operating XLR gooseneck microphones shall be rugged and unobtrusive with XLR-3F microphone input and an XLR-3M microphone output operating on 48 V phantom power and current consumption of 3.7 mA or better.	50	Nos	1,00,961.00	50,48,050.00
22	HBTMC/AUDIO/FA-22	SITC of wireless hand held microphone with cardioid polarity pattern, true diversity receiver, Frequency range: 470 - 516 MHz , 516 - 558 MHz, 734 - 776 MHz, THD, total harmonic distortion ≤ 0.9 % ; Signal-to-noise ratio ≥ 110 dBA; Switching bandwidth up to 42 MHz; Nominal deviation ±24 kHz ;Modulation Wideband FM ;Current consumption 300 mA ;Adjacent channel rejection Typically ≥ 65 dB; Intermodulation attenuation Typically ≥ 65 dB; Receiving frequency Max. 1680 receiving frequencies, adjustable in 25 kHz steps 20 frequency banks, each with up to 12 factory-preset channels, no intermodulation 1 frequency bank with up to 12 programmable channels; RF sensitivity< 2.5 µV for 52 dBA eff S/N; OEM should have authorized service centre in India	2	Nos	1,19,457.00	2,38,914.00
23	HBTMC/AUDIO/FA-23	Supply, Testing , Installation and commissioning of Directional Headset Microphone; Directional pattern: Cardioid Frequency response20 Hz - 20 kHz Effective frequency range, ±2 dB, Near field 2-3 cm (0.8 - 1.2 in)100 Hz - 20 kHz (4 - 6 dB soft boost at 15 kHz) Distortion, THD < 1% - CORE134 dB SPL RMS, 137 dB SPL peak Dynamic range - CORETyp. 111 dB With suitable adaptor for Wireless bodypack	2	Nos	1,80,173.00	3,60,346.00
24	HBTMC/AUDIO/FA-24	Supply, Installation, Testing & Commissioning of dynamic super- cardioid vocal microphone with with ON/OFF switch and with frequency response of 40 Hz – 16,000 Hz and sensitivity of 1.8 mV/Pa at 1 kHz, nominal impedance of 50 Ohm and min. terminating impedance of 1 k Ohm.OEM should have authorized service centre in India	4	Nos	18,908.00	75,632.00
25	HBTMC/AUDIO/FA-25	Supply, Installation, Testing & Commissioning of Premium 12-Input 2-Bus Mixer with XENYX Mic Preamps and British Eqs. 4 microphone & 4 Music/Multimedia Inputs	30	Nos	32,532.00	9,75,960.00
26	HBTMC/AUDIO/FA-26	Supply, Installation, Testing & Commissioning of Premium 24-Input 4/2-Bus Mixer with XENYX Mic Preamps & Compressors, Klark Teknik Multi-FX Processor, Wireless Option and USB/Audio Interface	1	Nos	86,048.00	86,048.00
27	HBTMC/AUDIO/FA-27	Supply, Testing , Installation and commissioning of Analog Mixer Type: Analog Channels: 24 Computer Connectivity: 1 x USB (Device, iPod, iPhone) Faders: 28 Inputs - Mic Preamps: 16 x XLR Inputs - Line: 24 x TRS (16 x Mono, 4 x Stereo) Inputs - Other: 4 x Stereo (RCA) Outputs - Main: 2 x XLR, 2 x TRS; 1 x XLR (Mono) Outputs - Other:4 x TRS (Monitor, Matrix), 4 x TRS (Bus)	1	Nos	2,80,691.00	2,80,691.00
28	BTMC-AUDIO-13	S/I/T/C of DVD player	4	Nos	7,288.00	29,152.00
28	HBTMC/AUDIO/FA-28	Supply, Testing , Installation and commissioning of Flying Bar	2	Nos.	96,155.00	1,92,310.00
29	HBTMC/AUDIO/FA-29	Supply, Testing , Installation and commissioning of Mounting Bracket.	2	Nos.	71,179.00	1,42,358.00
30	HBTMC/AUDIO/FA-30	Supply, Testing , Installation and commissioning of Mounting Frame Top.	2	Nos.	1,31,120.00	2,62,240.00
31	HBTMC/AUDIO/FA-31	Supply, Installation, testing and commissioning of Mounting frame for Speakers	4	Nos.	62,868.00	2,51,472.00
32	HBTMC/AUDIO/FA-32	Supply, Installation, Testing & Commissioning of Audio De- embedder	1	Nos.	39,284.00	39,284.00

29	HBTMC/AUDIO/FA-33	Supply, Installation, Testing & Commissioning of 1.5mm, 2 core PVC Speaker Cable, high quality twisted pair manufactured with bright annealed electrolytic oxygen free grade tinned copper conductors, bunched compactly	3500	Mtr	167.00	5,84,500.00
30	HBTMC/AUDIO/FA-34	Supply, Installation, Testing & Commissioning of 4sqmm 2 core PVC Speaker Cable	500	Mtr	316.00	1,58,000.00
31	HBTMC/AUDIO/FA-35	Supply, Installation, Testing & Commissioning of 2.5mm, 2 core PVC Speaker Cable, high quality twisted pair manufactured with bright annealed electrolytic oxygen free grade tinned copper conductors, bunched compactly	750	Mtr	218.00	1,63,500.00
32	HBTMC/AUDIO/FA-36	Supply, Installation, Testing & Commissioning of 2 core PVC audio Cable	1600	Mtr	159.00	2,54,400.00
TOTAL AMOUNT AUDIO SYSTEM WORKS (In Rs)						5,53,07,271.00

MUNICIPAL CORPORATION OF GREATER MUMBAI

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES VISUAL PROJECTION WORKS - HOSPITAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1	HBTMC/VIS/FA-21	Supply, Installation, Testing & Commissioning of Video Extender ; Extends HDMI signals over a single Cat 5e/6/6a cable, HDMI (3D, Deep color, 4K); HDCP 2.2 compliant, Superior video quality – up to 4K@35m (Cat 5e/6) / 40m, HDBaseT Anti-jamming – resists signal interference during high-quality video transmission using HDBaseT technology, Plug-and-play, Rack-mountable.	50	Nos	67,457.00	33,72,850.00
2	HBTMC/VIS/FA-22	Supply, Installation, Testing & Commissioning of Extends HDMI or VGA signals over a single Cat 5e/6/6a, Superior video quality: • HDMI: 4K at distance up to 100 m via a Cat 6a, VGA: 1600 x 1200 and 1920 x 1200 up to 100 m via a Cat 6a, HDMI 1.4 (3D, Deep color, 4K); HDCP 2.2 compliant, Supports HDBaseT Long Reach Mode – up to 150 m via a single Cat 5e/6 cable at resolutions up to 1080p, Designed to mount in a two-gang junction box, compatible with US type, Built-in PoH (Power over HDBaseT) function – receives power supply from the HDBaseT output port on the connected device, Supports Auto Switch – allows automatically switch to a newly plugged-in source, Functions as a switch or a converter, A Switch: Connects two sources (HDMI or VGA), A Converter: Applies receivers with different interface (DVI, DisplayPort, or HDMI), Supports RS-232 channel transmission or command mode for source switch control, Should include with Compatible HDBaseT Receivers, Plug-and-play, LED indication of sources and device status.	5	Nos	1,58,325.00	7,91,625.00
3	HBTMC/VIS/FA-24	Supply, Installation, testing and commissioning of HDBaseT Connectivity – extends an HDMI connection up to 100m via a single Cat 5e/6/6a, Supports HDBaseT Long Reach Mode – up to 150 m via a single Cat 5e/6 cable at resolutions up to 1080p, HDMI (3D, Deep Color, 4K), HDCP 2.2 compatible, Supports resolutions of up to Ultra HD 4kx2k and 1080p Full HD, Consumer Electronic Control (CEC) allows interconnected HDMI devices to communicate and respond to a single remote control, Supports wide screen format, Plug and play – no software required Built- in 8KV/ 15 KV ESD protection. Rack Mountable.	6	Nos	90,011.00	5,40,066.00
4	HBTMC/VIS/FA-44	HDMI HDBaseT-Lite Transmitter with EU Wall Plate (4K@40m) (HDBaseT Class B) Extends HDMI signals with superior video quality over a single Cat 5e/6/6a or ATEN 2L-2910 Cat 6 cable 4K up to 40 m; 1080p up to 70 m; HDMI 1.4 (3D, Deep color, 4K); HDCP 2.2 compliant; Designed to mount in a one-gang junction box; Supports RS-232 channel transmission	3	Nos	1,06,917.00	3,20,751.00
5	HBTMC/VIS/FA-45	Supply, Installation, Testing & Commissioning of HDMI HDBaseT- Lite (4K@40m) (HDBaseT Class B); Extends HDMI signals over a single Cat 5e/6/6a cable, HDMI (3D, Deep color, 4K); HDCP 2.2 compliant, Superior video quality – up to 4K@35m (Cat 5e/6) / 40m, HDBaseT Anti-jamming – resists signal interference during high-quality video transmission using HDBaseT technology, Plug- and-play, Rack-mountable.	3	Nos	67,457.00	2,02,371.00

6	HBTMC/VIS/FA-21	Supply, Installation, Testing & Commissioning of Video Extender ; Extends HDMI signals over a single Cat 5e/6/6a cable, HDMI (3D, Deep color, 4K); HDCP 2.2 compliant, Superior video quality – up to 4K@35m (Cat 5e/6) / 40m, HDBaseT Anti-jamming – resists signal interference during high-quality video transmission using HDBaseT technology, Plug-and-play, Rack-mountable.	50	Nos	67,457.00	33,72,850.00
7	HBTMC/VIS/FA-20	Supply, Installation, Testing & Commissioning of Video Switcher ; Allows up to four HDMI A/V sources to be connected to two HDMI displays, HDCP 1.4 compatible, HDMI (3D, Audio Return Channel and Deep Color), Supports Dolby True HD and DTS HD Master Audio, Audio Return Channel (ARC) function – connect an HDMI cable to the ARC port to send audio from your source device to your audio/video receiver, OSD for system configuration setting and information display, Instant switching between HDMI input sources via front panel pushbuttons or through the RS-232 serial control port, Feature EDID Expert technology to set up different configurations via different EDID mode, Allows users to view the HDMI input source port /device for easy selection, Supports superior video quality – HDTV resolutions of 480p, 720p, 1080i, 1080p (1920x1080); up to WUXGA (1920 x 1200), Built-in bi-directional RS-232 serial control port for high-end system control *, Extra audio from HDMI input signal that supports both optical and coaxial digiron, with necessary false ceiling with adequate LED lights, blower/f	22	Nos	2,02,371.00	44,52,162.00
8	HBTMC/VIS/FA-19	Supply, Installation, testing and commissioning of 8X8 4K HDMI Martrix Switch Connects any of 8 HDMI sources to any of 8 HDMI displays, Supports 4K resolutions up to UHD (3840 x 2160) and DCI (4096 x 2160) with refresh rates of 30 Hz (4:4:4) and 60 Hz (4:2:0), EDID Expert™ – selects optimum EDID settings for smooth power-up, high-quality display and use of the best video resolution across different screens, Multiple Control Methods – system management via front-panel pushbuttons, IR remote, RS-232 control, and Ethernet connections (Web GUI), Supports Dolby True HD and DTS HD Master audio, Signaling rates up to 3.4 Gbits for flawless 4K output, HDMI (3D, Deep Color, 4K) and HDCP 2.2 compatible, Consumer Electronics Control (CEC) allows interconnected HDMI devices to communicate and respond to a single remote control, ESD protection for HDMI, Firmware upgradeable, Rack Mountable (1U design)	1	Nos	7,98,328.00	7,98,328.00
9	BTMC-VISUAL-6	S/I/T/C of HDMI Distribution Amplifiers	2	Nos	50,820.00	1,01,640.00
10	HBTMC/VIS/FA-24	Supply, Installation, testing and commissioning of HDBaseT Connectivity – extends an HDMI connection up to 100m via a single Cat 5e/6/6a, Supports HDBaseT Long Reach Mode – up to 150 m via a single Cat 5e/6 cable at resolutions up to 1080p, HDMI (3D, Deep Color, 4K), HDCP 2.2 compatible, Supports resolutions of up to Ultra HD 4kx2k and 1080p Full HD, Consumer Electronic Control (CEC) allows interconnected HDMI devices to communicate and respond to a single remote control, Supports wide screen format, Plug and play – no software required Built- in 8KV/ 15 KV ESD protection. Rack Mountable.	8	Nos	90,011.00	7,20,088.00
11	HBTMC/VIS/FA-26	Supply, Installation, Testing & Commissioning of U/UTP LSZH 4 Pair network cable.Patch Cable (Stranded Conductor), 24 AWG x 4P	3310	Mtr	93.00	3,07,830.00
12	HBTMC/VIS/FA-37	Supply, Installation, Testing & Commissioning of VGA+Audio Cable	3	Mtr	6,794.00	20,382.00
13	HBTMC/VIS/FA-38	Supply, Installation, Testing & Commissioning of BC - 2T Control cable	90	Mtr	327.00	29,430.00
14	HBTMC/VIS/FA-27	Supply, Installation, Testing & Commissioning of AV Connectors TRS (Tip, Ring, Sleeve)	26	Nos	22,154.00	5,76,004.00
15	BTMC-VISUAL-11	S/I/T/C of Shielded RJ-45 Plug Kit for Extron XTP DTP 24 Shielded Twisted Pair Cable	6	Nos	3,630.00	21,780.00
16	BTMC-VISUAL-12	S/I/T/C of Fiber Optic Receiver for HDMI, Audio, and RS-232 HDMI over Fiber optic source from OT	4	Nos	1,81,500.00	7,26,000.00

17	HBTMC/VISL/FA-4	Supply, Installation, Testing & Commissioning of 9,000 lm(center), Business Projector Projection System 3LCD Technology LCD Panel 1.03 inch with C2 Fine Color Light Output 9,000 Lumen- 6,300 Lumen (economy) In accordance with ISO 21118:2013 White Light Output 9,000 Lumen - 6,300 Lumen (economy) In accordance with ISO 21118:2013 Portrait Colour Light Output 9,000 lm Portrait White Light Output 9,000 lm Resolution WUXGA, 1920 x 1200, 16:10 High Definition 4K enhancement Aspect Ratio 16:10 Contrast Ratio 2,500,000 : 1 Native Contrast 2,000 : 1 Light source Laser Laser Light source 20,000 hours Durability High, 30,000 hours Durability Eco Keystone Correction Manual vertical: ± 45 °, Manual horizontal ± 30 ° Colour Reproduction Upto 1.07 billion colours Throw Ratio 1.57 - 2.56:1 Zoom Motorized, Factor: 1 - 1.6 Projection Lens Zoom Ratio 1.57 - 2.56 : 1 Lens Optical Lens Shift Motorized - Vertical ± 60 %, horizontal ± 18 % Lens position memory 10 positions Screen Size 60 inches - 500 inches	1	Nos	26,81,898.00	26,81,898.00
18	HBTMC/VIS/FA-1	Supply, Installation, Testing & Commissioning of Projector ; 3,500 lumens and HD-ready WXGA resolution, Projection System 3LCD Technology LCD Panel 0.59 inch with D9 Color Light Output 3,500 Lumen- 2,900 Lumen (economy) In accordance with ISO 21118:2013 White Light Output 3,500 Lumen - 2,900 Lumen (economy) In accordance with ISO 21118:2013 Resolution WXGA, 1280 x 800, 16:10 High Definition HD ready Aspect Ratio 16:10 Contrast Ratio 14,000 : 1 Light source Lamp Lamp 250 W, 5,000 h durability, 10,000 h durability (economy mode), 9,000 h durability (economy mode) Keystone Correction Manual vertical: ± 3 °, Manual horizontal ± 3 ° Colour Video Processing 10 Bits 2D Vertical Refresh Rate 100 Hz - 120 Hz Colour Reproduction Upto 1.07 billion colours Throw Ratio 0.28 - 0.37:1 Zoom Digital, Factor: 1 - 1.35 Lens Optical Screen Size 60 inches - 100 inches Projection Distance Wide 0.4 m (60 inch screen) Projection Distance Tele 0.6 m (100 inch screen) Projection Lens F Number 1.6 Projection Lens Focal	4	Nos	3,10,917.00	12,43,668.00
19	HBTMC/VIS/FA-2	Supply, Installation, Testing & Commissioning of Projector; 3LCD Technology, RGB liquid crystal shutter LCD Panel 0.61 inch with C2 Fine; Color Light Output 4,000 Lumen- 2,400 Lumen (economy) White Light Output 4,000 Lumen - 2,400 Lumen (economy) In accordance with ISO 21118:2013 Resolution Full HD 1080p, 1920 x 1080, 16:9 High Definition Full HD Aspect Ratio 16:9 Contrast Ratio 16,000 : 1 Light source Lamp Lamp UHE, 230 W, 6,500 h durability, 17,000 h durability (economy mode) Keystone Correction Auto vertical: ± 30 °, Manual horizontal ± 30 ° Colour Video Processing 10 Bits 2D Vertical Refresh Rate 100 Hz - 120 Hz Colour Reproduction Upto 1.07 billion colours	12	Nos	2,44,701.00	29,36,412.00
20	HBTMC/VIS/FA-3	Supply, Installation, Testing & Commissioning of Projection system ; 6,000-lumen brightness, Full HD WUXGA resolution, and a range of great features including HDBaseT and HDMI connectivity, screen-mirroring and lens shift. Projection System 3LCD Technology, RGB liquid crystal shutter LCD Panel 0.67 inch with D10 Resolution WUXGA, 1920 x 1200, 16:10 High Definition Full HD Aspect Ratio 16:10 Contrast Ratio 2,500,000 : 1 Light source Laser Laser Light source 20,000 hours Durability High, 30,000 hours Durability Eco Keystone Correction Manual vertical: ± 30 °, Manual horizontal ± 30 ° Colour Reproduction Upto 1.07 billion colours	6	Nos	6,17,817.00	37,06,902.00
21	HBTMC/VIS/FA-11	Supply, Installation, Testing & Commissioning of High Gain Fabric , Matte Finish 250-300" D Motorized Projector Screen	3	Nos	4,43,093.00	13,29,279.00
22	HBTMC/VIS/FA-9	Supply, Installation, Testing & Commissioning of High Gain Fabric , Matte Finish 150" D Motorized Projector Screen	12	Nos	1,48,357.00	17,80,284.00

23	HBTMC/VIS/FA-10	Supply, Installation, Testing & Commissioning of High Gain Fabric , Matte Finish 200" D Motorized Projector Screen	4	Nos	2,96,714.00	11,86,856.00
24	HBTMC/VIS/FA-5	Supply, Installation, Testing & Commissioning of Document Camera;Supply, Installation, Testing & Commissioning of Document Camera ; Pixels: 2MP (1920 x 1080 pixels) or better Camera Sensor: 1/2.7 inch CMOS Sensor ; Resolution: Up to Full HD (1080p) Zoom: 10x Digital Zoom, 12x Optical Zoom Weight: Approx 3.0kg	5	Nos	1,13,147.00	5,65,735.00
25	HBTMC/VIS/FA-6	Supply, Installation, Testing & Commissioning of Document Camera; Pixels: 2MP (1920 x 1080 pixels) Camera Sensor: 1/2.7 inch CMOS Sensor Resolution: Up to Full HD (1080p) Zoom: 8x Digital Zoom Weight: Approx 1.0kg	4	Nos	97,765.00	3,91,060.00
26	HBTMC/VIS/FA-46	Supplying, erecting, testing, commissioning of Fiber Optic Transmitter for HDMI, Audio, and RS-232 Fiber optic HDMI Extender	1	Nos	3,85,661.00	3,85,661.00
27	HBTMC/VIS/FA-47	Supplying, erecting, testing, commissioning of Configurable Eight Output Fiber Optic Distribution Amplifier	1	Nos	11,59,203.00	11,59,203.00
28	HBTMC/VIS/FA-26	Supply, Installation, Testing & Commissioning of U/UTP LSZH 4 Pair network cable.Patch Cable (Stranded Conductor), 24 AWG x 4P	2500	Mtr	93.00	2,32,500.00
29	HBTMC/VIS/FA-51	Supplying, erecting, testing, commissioning of Ultra Flexible High Speed HDMI Cables	100	Nos	14,196.00	14,19,600.00
30	HBTMC/VIS/FA-46	Supplying, erecting, testing, commissioning of Fiber Optic Transmitter for HDMI, Audio, and RS-232 Fiber optic HDMI Extender	1	Nos	3,85,661.00	3,85,661.00
31	HBTMC/VIS/FA-47	Supplying, erecting, testing, commissioning of Configurable Eight Output Fiber Optic Distribution Amplifier	1		11,59,203.00	11,59,203.00
32	HBTMC/VIS/FA-47	Supplying, erecting, testing, commissioning of Configurable Eight Output Fiber Optic Distribution Amplifier	1	Nos	11,59,203.00	11,59,203.00
33	HBTMC/VIS/FA-32	Supply, Installation, Testing & Commissioning of Connectors XLR (External Line Return) with all accessories.	1	Nos	1,03,849.00	1,03,849.00
34	HBTMC/VIS/FA-33	Supply, Installation, Testing & Commissioning of AV RCA connectors.	1	Nos	1,08,795.00	1,08,795.00
35	HBTMC/VIS/FA-1	Supply, Installation, Testing & Commissioning of Projector ; 3,500 lumens and HD-ready WXGA resolution, Projection System 3LCD Technology LCD Panel 0.59 inch with D9 Color Light Output 3,500 Lumen- 2,900 Lumen (economy) In accordance with ISO 21118:2013 White Light Output 3,500 Lumen - 2,900 Lumen (economy) In accordance with ISO 21118:2013 Resolution WXGA, 1280 x 800, 16:10 High Definition HD ready Aspect Ratio 16:10 Contrast Ratio 14,000 : 1 Light source Lamp Lamp 250 W, 5,000 h durability, 10,000 h durability (economy mode), 9,000 h durability (economy mode) Keystone Correction Manual vertical: ± 3 °, Manual horizontal ± 3 ° Colour Video Processing 10 Bits 2D Vertical Refresh Rate 100 Hz - 120 Hz Colour Reproduction Upto 1.07 billion colours Throw Ratio 0.28 - 0.37:1 Zoom Digital, Factor: 1 - 1.35 Lens Optical Screen Size 60 inches - 100 inches Projection Distance Wide 0.4 m (60 inch screen) Projection Distance Tele 0.6 m (100 inch screen) Projection Lens F Number 1.6 Projection Lens Focal	4	Nos	3,10,917.00	12,43,668.00

36	HBTMC/VIS/FA-2	Supply, Installation, Testing & Commissioning of Projector; 3LCD Technology, RGB liquid crystal shutter LCD Panel 0.61 inch with C2 Fine; Color Light Output 4,000 Lumen- 2,400 Lumen (economy) White Light Output 4,000 Lumen - 2,400 Lumen (economy) In accordance with ISO 21118:2013 Resolution Full HD 1080p, 1920 x 1080, 16:9 High Definition Full HD Aspect Ratio 16:9 Contrast Ratio 16,000 : 1 Light source Lamp Lamp UHE, 230 W, 6,500 h durability, 17,000 h durability (economy mode) Keystone Correction Auto vertical: ± 30 °, Manual horizontal ± 30 ° Colour Video Processing 10 Bits 2D Vertical Refresh Rate 100 Hz - 120 Hz Colour Reproduction Upto 1.07 billion colours	18	Nos	2,44,701.00	44,04,618.00
37	HBTMC/VIS/FA-3	Supply, Installation, Testing & Commissioning of Projection system ; 6,000-lumen brightness, Full HD WUXGA resolution, and a range of great features including HDBaseT and HDMI connectivity, screen-mirroring and lens shift. Projection System 3LCD Technology, RGB liquid crystal shutter LCD Panel 0.67 inch with D10 Resolution WUXGA, 1920 x 1200, 16:10 High Definition Full HD Aspect Ratio 16:10 Contrast Ratio 2,500,000 : 1 Light source Laser Laser Light source 20,000 hours Durability High, 30,000 hours Durability Eco Keystone Correction Manual vertical: ± 30 °, Manual horizontal ± 30° Colour Reproduction Upto 1.07 billion colours	6	Nos	6,17,817.00	37,06,902.00
38	HBTMC/VIS/FA-9	Supply, Installation, Testing & Commissioning of High Gain Fabric , Matte Finish 150" D Motorized Projector Screen	18	Nos	1,48,357.00	26,70,426.00
39	HBTMC/VIS/FA-10	Supply, Installation, Testing & Commissioning of High Gain Fabric , Matte Finish 200" D Motorized Projector Screen	4	Nos	2,96,714.00	11,86,856.00
40	HBTMC/VIS/FA-20	Supply, Installation, Testing & Commissioning of Video Switcher ; Allows up to four HDMI A/V sources to be connected to two HDMI displays, HDCP 1.4 compatible, HDMI (3D, Audio Return Channel and Deep Color), Supports Dolby True HD and DTS HD Master Audio, Audio Return Channel (ARC) function – connect an HDMI cable to the ARC port to send audio from your source device to your audio/video receiver, OSD for system configuration setting and information display, Instant switching between HDMI input sources via front panel pushbuttons or through the RS-232 serial control port, Feature EDID Expert technology to set up different configurations via different EDID mode, Allows users to view the HDMI input source port /device for easy selection, Supports superior video quality – HDTV resolutions of 480p, 720p, 1080i, 1080p (1920x1080); up to WUXGA (1920 x 1200), Built-in bi-directional RS-232 serial control port for high-end system control *, Extra audio from HDMI input signal that supports both optical and coaxial digiron, with necessary false ceiling with adequate LED lights, blower/f	6	Nos	2,02,371.00	12,14,226.00
TOTAL AMOUNT VISUAL PROJECTION WORKS (In Rs)						5,27,16,622.00

MUNICIPAL CORPORATION OF GREATER MUMBAI
PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS
On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES STAGE LIGHTING WORKS - HOSPITAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1	HBTMC/SL/FA-05	Supply, Installation, Testing & Commissioning of Dimmer : Dimmer pack for Profile spot	1	Nos	₹ 41,402.00	₹ 41,402.00
2	HBTMC/SL/FA-02	Supply, Installation, Testing & Commissioning of Light controller : 1024 dmx control, 2 opto isolated interface run 10 scenes, control 96 intelligent light small Avo light type controller	1	Nos	₹ 1,69,918.00	₹ 1,69,918.00
3	HBTMC/SL/FA-04	Supply, Installation, Testing & Commissioning of Profile 575 : 700 watts 26 degree	3	Nos	₹ 58,849.00	₹ 1,76,547.00
4	HBTMC/SL/FA-01	Supply, Installation, Testing & Commissioning of Warm light : 3x54 watts LED white PAR	24	Nos	₹ 38,445.00	₹ 9,22,680.00
5	HBTMC/SL/FA-04	Supply, Installation, Testing & Commissioning of Profile 575 : 700 watts 26 degree	3	Nos	₹ 58,849.00	₹ 1,76,547.00
6	HBTMC/SL/FA-07	Supply, Installation, Testing & Commissioning of Cable: Cable 1.5 sqm mm for PAR light	500	Mtr	₹ 268.00	₹ 1,34,000.00
7	BTMC-STGL-9	S/I/T/C of Panel box with 36 industrial socket	1	Nos	₹ 66,875.00	₹ 66,875.00
8	HBTMC/VIS/FA-34	Supply, Installation, Testing & Commissioning of 42U Equipment Rack for housing all rack mountable equipments with internal wiring, front glass door; heat dessipation fans; movement wheels, power distribution units etc.	1	Nos	₹ 76,948.00	₹ 76,948.00
9	HBTMC/SL/FA-08	Supply, Installation, Testing & Commissioning of C clamp to hang lights	30	Nos	₹ 1,176.00	₹ 35,280.00
10	BTMC-STGL-12	S/I/T/C of patch cord with top	24	Nos	₹ 594.00	₹ 14,256.00
11	BTMC-STGL-13	S/I/T/C of 2.5sqmm 4core FRLSH Flexible electrical cable ISI Mark	500	Mtr	₹ 409.00	₹ 2,04,500.00
12	HBTMC/SL/FA-09	Supply, Installation, Testing & Commissioning of Connectors : Three pin connectors.	1	Nos	₹ 34,617.00	₹ 34,617.00
TOTAL AMOUNT STAGE LIGHTING WORKS (In Rs)						₹ 20,53,570.00

MUNICIPAL CORPORATION OF GREATER MUMBAI

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES HT & LT ELECTRICAL WORKS - RESIDENTIAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1	R2-ME-15-31-a	Providing Round bottom FIRE Bucket of 9 Litres capacity as per IS : 2546 made out of 24 gauge G.I. sheet with extra handle at bottom duly painted white inside and red outside with FIRE Mark, on provided stand/wall hook.	20.00	Nos	₹ 814.00	₹ 16,280.00
2	R2-ME-15-31-b	Providing Floor mounting stand for keeping 4 Nos. of FIRE buckets 1500mm in length, 900mm in height frame made out of 30x30x4 mm angle iron with cross supports for legs, welded with 4 hooks and duly painted with one coat of red lead and two coats of silver Paint.	5.00	Nos	₹ 4,748.00	₹ 23,740.00
3	R2-ME-15-31-c	Supplying and erecting Wall hook 225mm projection for keeping fire buckets made out of 15 mm dia. M.S. Rod grouted in wall to a depth of minimum 15cms	5.00	Nos	₹ 271.00	₹ 1,355.00
4	R2-ME-15-31-d	Supplying standard first aid box with necessary antiseptic cream, medicine for use on wounds due burn, crepe bandage, gauge bandage, medicated ready to use bandage (Bandaid) adhesive tape for medicinal use, scissors, anti-septic solution etc. (All above contents shall be of standard makes)	5.00	Nos	₹ 3,392.00	₹ 16,960.00
5	RBH18-PWD-10-2-30	Supplying and fixing PVC Synthetic elastomer electrically m2 insulating mat with class A insulation conforming to IS: 15652 – 2006 & CPRI tested having 2 mm thickness upto 3.3 Kv	25.00	Sqm	₹ 4,867.00	₹ 1,21,675.00
6	RBH18-PWD-10-2-31	Supplying and fixing PVC Synthetic elastomer electrically m2 insulating mat with class B insulation conforming to IS: 15652 – 2006 & CPRI tested having 2.5 mm thickness upto 11 kV	50.00	Sqm	₹ 5,236.00	₹ 2,61,800.00
7	R2-ME-15-30-e	Supplying and erecting D.C.P. type Fire Extinguisher 6 kg capacity cartridge type with Gun Metal cap 150 gram CO2 gas cartridge, powder and brackets conforming to IS 2171- 1985/ IS 15683 and complete erected with necessary clamps made from 50x6 mm M.S. flat with nuts & bolts grouted in wall complete.	20.00	Nos	₹ 2,645.00	₹ 52,900.00
8	R2-ME-5-15-a	Fluorescent emergency light fitting with 1 No. 1 feet (30cms.) single tube 9 / 11 W with M.F. SLA rechargable battery with 3 hrs of back up.	40.00	Nos	₹ 1,332.00	₹ 53,280.00
9	R2-ME-15-29-a	SITC of Auto glow signage for Emergency Fire Exit	60.00	Nos	₹ 814.00	₹ 48,840.00
10	R2-ME-15-29-b	SITC of Auto glow signage for Staircase direction	60.00	Nos	₹ 814.00	₹ 48,840.00
11	R2-ME-15-29-c	SITC of Auto glow signage for Do not use lift in case of Fire etc.	60.00	Nos	₹ 1,085.00	₹ 65,100.00
12	BAH-ELEC-FA-21	SITC of LIGHTING & POWER PANEL As per SLD	1.00	Nos	₹ 3,50,000.00	₹ 3,50,000.00
		NON DG PANEL 3rd QUADRANT Panel comprising of 400 amps, 35KA, TPN, MCCB with voltmeter & ammeter as incomer with 400 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 02 nos. of 250A, TP MCCB, 11 nos of 80A, TPN MCB, 03 no. of 63A, TPN MCCB, as outgoing.				
13	BAH-ELEC-FA-26	SITC of LIFT PANEL As per SLD	1.00	Nos	₹ 2,10,000.00	₹ 2,10,000.00
		LIFT Panel comprising of 320 amps, 35KA, TPN, MCCB with voltmeter & ammeter as incomer with 320 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 04 nos of 100A TPN MCB, 01 no. of 63A, TPN MCB, 01 no. of 40A, TPN MCB, 05 no. of 32A, TPN MCB, 03 no. of 20A, TPN MCB as outgoing.				
14	BAH-ELEC-FA-28	SITC of MAIN STAFF QUARTER BUILDING As per SLD	1.00	Nos	₹ 7,50,000.00	₹ 7,50,000.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		MAIN STAFF QUARTER BUILDING Panel comprising of 400 amps, 35KA, TPN, MCCB with voltmeter & ammeter as incomer with 400 amps 4 pole (35 KA for 1 sec.) , 415V, 50Hz, AC, AL bus bars. Panel shall have 41 nos. of 40A, DP MCB, With KWH meter Including Indication Lamps as outgoing.				
15	RBH18-ELEC-FA-28	Supplying,erecting & making 500A FP MCCB,35KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	₹ 1,32,559.00	₹ 1,32,559.00
16	RBH18-ELEC-FA-29	Supplying,erecting & making 250A FP MCCB,35KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	₹ 1,06,403.32	₹ 1,06,403.32
17	RBH18-ELEC-FA-31	Supplying,erecting & making 100A FP MCCB,25KA+TVSS BOX with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	₹ 71,518.64	₹ 71,518.64
18	RBH18-ELEC-FA-37	Supplying,erecting & making 150/160A FP ATS,25KA (Asco - 230series) with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	₹ 83,250.88	₹ 83,250.88
19	RBH18-ELEC-FA-38	Supplying,erecting & making 200A FP ATS,25KA (Asco - 230series) with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	₹ 91,179.48	₹ 91,179.48
20	RBH18-ELEC-FA-39	Supplying,erecting & making 250A FP ATS,25KA (Asco - 230series) with 1.6 mm thick CRCA sheet steel enclosure of approved make design.	1.00	Nos	₹ 95,143.20	₹ 95,143.20
		Supply, Installation, testing and connection of 3P4W+50%E internally earthed Al. Bus duct as per rating given below with all necessary fabrication of supports and other accessories works complete as per specification. All joints / tees / bends / phase change over boxes/ Flange End/Horizontal Bend/Vertical Bend/Plug-in Point/ Vertical Spring Hanger/Fix hanger/ End Cover/ Horizontal Fixing Clips/Tinned Copper Braided Flexibles -360mm (with Hardware - Nuts and Bolts) etc are deemed to be included in the Rmt supply. - Sandwich type - IP 55 unless otherwise specified in item. Minimum fault level of Bus duct shall be as per panel but bot less then 35 kA. Arrangement for tapping earth as per requirement & approved shop drawings.All necessary supports & work for installation of busduct shall be included in quoted cost.All joint in horizontal ran shall have ip65 protection.Type test Certificates are from ERDA (ASTA Accredited) lab as per IEC 61439 Part 1 and 6 Temperature rise design as per Latest IEC 61439 Part 1 and 6				
21	BAH-ELEC-FA-30	SITC of 415V/690V/1000V Sandwich construction Busbar trunking system with Multilayer Class-F insulation and; Conductors : Aluminium Rating : 400A Configuration : 3P4W+50%E IP Rating : IP54 Enclosure : GI 1.6mm thickness Impulse Withstand Voltage : 8kV Paint Shade : RAL7032 Epoxy Powder Coating Straight Run Feeder IP55	180.00	Mtr	₹ 38,742.00	₹ 69,73,560.00
22	BAH-ELEC-FA-32	SITC of Feed units in following ratings for above Rising main. 1 Nos. 630A, 415V, Ics=35kA, 4P MCCB with a set of CT's., Multi Function meter (V, A, kWh, KVAh, KW, KVA, KVAR, PF, Hz.) with Phase Indicating Lamps with MCB. End feed Panel with switchgear (Suitable for MCCB) - Al Busbar Arrangement , Complete with Aluminium busbar or Cu Flexible with provision for rotary handle mechanism with bottom Cable entry and top Busduct outgoing provision.		Nos	₹ 1,45,000.00	₹ 0.00
		SITC of tap off boxes with MCCBs. All MCCBs shall be with thermal magnetic adjustable releases for O/L and S/C. The MCCBs shall have Ics = 100% Icu. All tap of boxes shall support the cable sizes given in SLD along with tender.				
23	BAH-ELEC-FA-36	125 A,FP,25KA.	1.00	Nos	₹ 14,800.00	₹ 14,800.00
24	BAH-ELEC-FA-37	100 A,FP,25KA.	1.00	Nos	₹ 10,500.00	₹ 10,500.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
25	BAH-ELEC-FA-40	40 A,FP,25KA. Supply, Unloading at site, shifting to final location, assembling, leveling, grouting, erecting, testing and commissioning of following panels as per drawings. Any sort of fabrication work required for erection of panel at site shall be done by the contractor. The contractor shall also check for all the loose joints and continuity of the panel. Any physical or technical defects envisaged by the contractor shall be informed to client as soon as panels are opened.As per SLD	250.00	Nos	₹ 10,500.00	₹ 26,25,000.00
26	R2-ME-2-8	Excavating the trenches and refilling,reinstatement of the same after the cable is laid in approved manner (750 mm deep, 600 mm wide),in all types of soils 1 Cu. Mtr. = 2.2 RMT.	50.00	Cu. Mtr.	₹ 307.00	₹ 15,350.00
		G.I. Cable tray with all other accessories : Perforated Type				
		Readymade 2500mm standard length, prefabricated, perforated cable tray from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. Galvanisation thickness shall be minimum 86 Micron.				
27	R2-ME-2-13-a	75 x 25mm (W x H) - (16 SWG - 1.6mm) without cover	100.00	Mtr	₹ 1,074.00	₹ 1,07,400.00
28	R2-ME-2-13-b	100 x 25mm (W x H) - (16 SWG - 1.6mm) without cover	200.00	Mtr	₹ 1,197.00	₹ 2,39,400.00
29	R2-ME-2-13-c	150 x 25mm (W x H) - (16 SWG - 1.6mm) without cover	220.00	Mtr	₹ 1,237.00	₹ 2,72,140.00
30	R2-ME-2-13-d	200 x 50mm (W x H) - (16 SWG - 1.6mm) without cover	100.00	Mtr	₹ 1,522.00	₹ 1,52,200.00
31	R2-ME-2-13-e	300 x 50mm (W x H) - (16 SWG - 1.6mm) without cover	250.00	Mtr	₹ 2,067.00	₹ 5,16,750.00
32	R2-ME-2-13-k	450 x 75mm (W x H) - (14SWG - 2mm) without cover	50.00	Mtr	₹ 3,533.00	₹ 1,76,650.00
		G.I. Cable tray with all other accessories : Ladder Type				
		CABLES, EXCAVATION, G.I. CABLE TRAYS & ACCESSORIES, CABLE JOINTS, CABLE PROTECTION PIPE.				
		G.I. Trunking / Duct / Raceway & all other accessories				
		Readymade 2500mm standard length, prefabricated, GI trunking from MS sheet and then hot dip galvanised, of following sizes and associated accessories such as coupler plates, tees, elbow etc. 50 mm side flanges shall be provided. Galvanisation thickness shall be minimum 86 Micron. cost of trunking shall be included junction box of suitable size, and all other accessories required to complete the work.				
33	R2-ME-2-15-c	100 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	100.00	Mtr	₹ 690.00	₹ 69,000.00
34	R2-ME-2-15-d	150 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	230.00	Mtr	₹ 906.00	₹ 2,08,380.00
35	R2-ME-2-15-e	300 x 40mm (W x H) - (14 SWG - 2mm) with cover without partition	60.00	Mtr	₹ 1,498.00	₹ 89,880.00
		PVC Trunking with cover & all other accessories				
		Following sizes PVC trunking with cover and all other accessories to complete the work like bend, partion, internal and external angles etc. cost of trunking shall be included base, cover, finishing accessories, junction boxes and mounting wiring accessories.				
36	R2-ME-2-16-a	50 x 50mm (W x H) - PVC Trunking with cover	30.00	Mtr	₹ 280.00	₹ 8,400.00
37	R2-ME-2-16-b	80 x 50 mm (W x H) - PVC Trunking with cover	30.00	Mtr	₹ 676.00	₹ 20,280.00
38	R2-ME-2-16-c	100 x 50mm (W x H) - PVC Trunking with cover	50.00	Mtr	₹ 1,090.00	₹ 54,500.00
39	R2-ME-2-16-d	150 x 50mm (W x H) - PVC Trunking with cover	50.00	Mtr	₹ 2,129.00	₹ 1,06,450.00
		SWITCHGEARS, MCB DB, PANELS				
		Distribution Board (Box only)				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
	R2-ME-1-15	IP43 SPN & TPN Distribution board with metal door of various sizes on wall/ Column/ floor mounting, with detachable gland plate, terminal connectors and other required hardware & fasteners. DB shall be designed for incoming MCB & no. of outgoing MCB as per requirement or no. of outgoing way (Cost of the DBs will be without MCB, MCCB & other accessories)				
40	R2-ME-1-15-a	IP43 8 Way SPN DB (4 + 4Way)	15.00	Nos	₹ 2,458.00	₹ 36,870.00
41	R2-ME-1-15-b	IP43 12 Way SPN DB (4 + 8Way)	20.00	Nos	₹ 2,955.00	₹ 59,100.00
42	R2-ME-1-15-c	IP43 16 Way SPN DB (4 + 12Way)	250.00	Nos	₹ 3,708.00	₹ 9,27,000.00
43	R2-ME-1-15-d	IP43 4 Way TPN DB (8 + 12Way)	2.00	Nos	₹ 4,846.00	₹ 9,692.00
44	R2-ME-1-15-f	IP43 8 Way SPN DB (8 + 24Way)	5.00	Nos	₹ 7,164.00	₹ 35,820.00
45	R2-ME-1-15-g	IP43 12 Way SPN DB (8 + 36Way)	10.00	Nos	₹ 10,733.00	₹ 1,07,330.00
		MCCB incomer and MCB outgoing Distribution Board				
	R2-ME-1-16	IP 43 & IP 30 Vertical TPN Distribution Board with Modular Incomer with Metal door (Box only) of various sizes on wall/ Column/ floor mounting, with detachable gland plate, terminal connectors and other required hardware & fasteners. DB shall be designed with provision for MCCB as incomer & SP / TP MCB as outgoing as per requirement. (Cost of the DBs will be without MCB, MCCB). DB shall be as per IS 8623- 1 & 3 / IEC 61439- 1 & 3.				
46	R2-ME-1-16-a	IP 43 4 Way MCCB DB (125/160A MCCB + 4Way TP MCB /12 Way SP MCB)	2.00	Nos	₹ 14,396.00	₹ 28,792.00
47	R2-ME-1-16-c	IP 43 8 Way MCCB DB (125/160A MCCB + 8Way TP MCB /24 Way SP MCB)	2.00	Nos	₹ 17,998.00	₹ 35,996.00
48	R2-ME-1-15-l	Supply, installation, testing & commissioning of distribution boards, 12 way VTPN type DB with door	1.00	Nos	₹ 20,443.00	₹ 20,443.00
49	R2-ME-1-15-m	Supply, installation, testing & commissioning of distribution boards, 8 way VTPN type DB with door	2.00	Nos	₹ 15,195.00	₹ 30,390.00
50	R2-ME-1-15-n	Supply, installation, testing & commissioning of distribution boards, 4 way VTPN type DB with door	2.00	Nos	₹ 11,946.00	₹ 23,892.00
51	R2-ME-1-15-ag	IP 43 TPN Distribution Board with metal door (Box only) 4 Way (4 + 12 way)	2.00	Nos	₹ 5,279.00	₹ 10,558.00
52	R2-ME-1-15-ai	IP 43 TPN Distribution Board with metal door (Box only) 6 Way (8 + 18 way)	2.00	Nos	₹ 6,866.00	₹ 13,732.00
53	R2-ME-1-15-aj	IP 43 TPN Distribution Board with metal door (Box only) 8 Way (8 + 24 way)	4.00	Nos	₹ 8,176.00	₹ 32,704.00
54	R2-ME-1-15-ak	IP 43 TPN Distribution Board with metal door (Box only) 12 Way (8 + 36 way)	10.00	Nos	₹ 12,209.00	₹ 1,22,090.00
		MCB				
	R2-ME-1-17	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required.				
55	R2-ME-1-17-b	10A SP MCB	2,000.00	Nos	₹ 335.00	₹ 6,70,000.00
56	R2-ME-1-17-c	16A/20A SP MCB	200.00	Nos	₹ 335.00	₹ 67,000.00
57	R2-ME-1-17-i	32A DP MCB	20.00	Nos	₹ 995.00	₹ 19,900.00
58	R2-ME-1-17-j	63A DP MCB	1.00	Nos	₹ 1,600.00	₹ 1,600.00
59	R2-ME-1-17-v	32A 4P MCB	250.00	Nos	₹ 2,193.00	₹ 5,48,250.00
60	R2-ME-1-17-w	63A 4P MCB	20.00	Nos	₹ 3,161.00	₹ 63,220.00
61	R2-ME-1-17-ap	MCB 'C' Curve, 15kA - 80A FP MCB	1.00	Nos	₹ 14,635.00	₹ 14,635.00
		MCCB				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
	R2-ME-1-18	Unit rate of 415V, 10kA/16kA, Moulded case circuit breaker with Thermal magnetic overload suitable for DB mounting complete with connection, testing & commissioning etc. as required.				
62	R2-ME-1-18-c	100A 4P MCCB	1.00	Nos	₹ 5,299.00	₹ 5,299.00
63	R2-ME-1-18-d	125A 4P MCCB	2.00	Nos	₹ 8,887.00	₹ 17,774.00
64	R2-ME-1-18-f	160A 4P MCCB	1.00	Nos	₹ 10,961.00	₹ 10,961.00
65	R2-ME-1-18-i	250A TPN MCCB	1.00	Nos	₹ 18,233.00	₹ 18,233.00
		MCBs in 16SWG sheet steel metal box				
	R2-ME-1-19	MCBs In 16 SWG CRCA sheet steel enclosure, powder coated, wall / column mounted with provision for support arrangement, 2 earthing terminal, Incoming & outgoing cable terminal etc. with required hardware & fasteners. All MCBs shall be rated for 10kA, 'C' curve type. Colour shade shall be RAL 7032 Smoke gray as per IS 5. IP 43 Enclosure.				
66	R2-ME-1-19-a	16/32 Amp. DP MCB	5.00	Nos	₹ 2,974.00	₹ 14,870.00
67	R2-ME-1-19-b	16/32 Amp. TPN MCB	5.00	Nos	₹ 4,174.00	₹ 20,870.00
68	R2-ME-1-19-c	63 Amp. TPN MCB	5.00	Nos	₹ 5,143.00	₹ 25,715.00
		Earth Leakage circuit Breaker / Residual Current circuit Breaker				
	R2-ME-1-25	ELCBs In 16 SWG CRCA sheet steel enclosure, powder coated, wall / column mounted with provision for support arrangement, 2 earthing terminal, Incoming & outgoing cable terminal etc. Colour shade shall be RAL 7032 Smoke gray as per IS 5.				
		with 300mA Sensitivity				
69	R2-ME-1-25-m	25Amp. 2Pole	2.00	Nos	₹ 4,509.00	₹ 9,018.00
70	R2-ME-1-25-n	40Amp. 2Pole	250.00	Nos	₹ 5,079.00	₹ 12,69,750.00
71	R2-ME-1-25-n1	63Amp. 2Pole	5.00	Nos	₹ 6,064.00	₹ 30,320.00
72	R2-ME-1-25-p	40Amp. 4Pole	4.00	Nos	₹ 5,917.00	₹ 23,668.00
73	R2-ME-1-25-q	63Amp. 4Pole	2.00	Nos	₹ 6,707.00	₹ 13,414.00
		with 100mA Sensitivity				
74	R2-ME-1-25-c	40Amp. 2Pole ELCB	3.00	Nos	₹ 5,079.00	₹ 15,237.00
75	R2-ME-1-25-f	40Amp. 4Pole ELCB	2.00	Nos	₹ 5,917.00	₹ 11,834.00
76	R2-ME-1-25-g	63Amp. 4Pole ELCB	2.00	Nos	₹ 6,707.00	₹ 13,414.00
		with 30mA Sensitivity				
77	R2-ME-1-25-h	25Amp. 2Pole	5.00	Nos	₹ 4,355.00	₹ 21,775.00
78	R2-ME-1-25-i	40Amp. 2Pole	5.00	Nos	₹ 4,843.00	₹ 24,215.00
79	R2-ME-1-25-j	25Amp. 4Pole	8.00	Nos	₹ 5,524.00	₹ 44,192.00
80	R2-ME-1-25-k	40Amp. 4Pole	8.00	Nos	₹ 5,698.00	₹ 45,584.00
81	RBH18-PWD-5-6-3	Providing, erecting & commissioning RCCB only of electro magnetic type with 30mA sensitivity and having capacity of 63 A. 2 pole complete as per specification No. SW- RCCB/RCCB	2.00	Nos	₹ 3,252.00	₹ 6,504.00
82	RBH18-PWD-5-6-15	Supply & fixing CRCA sheet box with earthing terminals for housing 2 pole RCCB/RCCB + MCB complete on iron frqme/laminated board.	10.00	Nos	₹ 226.00	₹ 2,260.00
83	RBH18-PWD-5-6-16	Supply & fixing CRCA sheet box with earthing terminals for housing 4 pole RCCB/RCCB + MCB complete on iron frqme/laminated board.	10.00	Nos	₹ 292.00	₹ 2,920.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
		Supply, Laying of cables on cable trays, structural supports and cable supports provided, include unloading, shifting upto site. The scope includes clamping of cables by ready made G.I. spacers, saddles or clamps fabricated out of M.S. strip 3 mm thick, Treasing and Clamping of Cable on cable tray, supply of all clamping materials and hardware etc., providing cable tags made out of aluminium strip and 75x20 mm in size with cable number and size punched on it. Cable tags shall be tied to cables at every 10 meter interval and at both the ends. All cables shall be of CU. FRLSZH category.				
84	R2-ME-2-3a-d	6C x 1.5 Sq.mm Cu. FRLSZH Cable	100.00	Mtr	₹ 169.00	₹ 16,900.00
85	R2-ME-2-3a-h	6C x 2.5 Sq.mm Cu. FRLSZH Cable	100.00	Mtr	₹ 247.00	₹ 24,700.00
86	R2-ME-2-3a-f	3C x 2.5 Sq.mm Cu. FRLSZH Cable	1,000.00	Mtr	₹ 142.00	₹ 1,42,000.00
87	R2-ME-2-3a-j	3C x 4 Sq.mm Cu. FRLSZH Cable	100.00	Mtr	₹ 203.00	₹ 20,300.00
88	R2-ME-2-3a-n	3C x 6 Sq.mm Cu. FRLSZH Cable	2,500.00	Mtr	₹ 263.00	₹ 6,57,500.00
89	R2-ME-2-3a-r	3C x 10 Sq.mm Cu. FRLSZH Cable	50.00	Mtr	₹ 410.00	₹ 20,500.00
90	RBH18-ELEC-FA-56	3C x 16 Sq.mm Cu. FRLSZH Cable	250.00	Mtr	₹ 684.40	₹ 1,71,100.00
91	R2-ME-2-3a-g	4C x 2.5 Sq.mm Cu.FRLSZH Cable	600.00	Mtr	₹ 178.00	₹ 1,06,800.00
92	R2-ME-2-3a-k	4C x 4.0 Sq.mm Cu. FRLSZH Cable	700.00	Mtr	₹ 273.00	₹ 1,91,100.00
93	R2-ME-2-3a-o	4C x 6.0 Sq.mm Cu. FRLSZH Cable	300.00	Mtr	₹ 337.00	₹ 1,01,100.00
94	R2-ME-2-3a-s	4C x 10 Sq.mm Cu. FRLSZH Cable	250.00	Mtr	₹ 597.00	₹ 1,49,250.00
95	R2-ME-2-3a-u	4C x 16 Sq.mm Cu. FRLSZH Cable	250.00	Mtr	₹ 863.00	₹ 2,15,750.00
96	R2-ME-2-3a-v	4C x 25 Sq.mm Cu. FRLSZH Cable	20.00	Mtr	₹ 1,450.00	₹ 29,000.00
97	R2-ME-2-3a-w	3.5C x 35 Sq.mm Cu. FRLSZH Cable	200.00	Mtr	₹ 1,740.00	₹ 3,48,000.00
98	R2-ME-2-3a-x	3.5C x 50 Sq.mm Cu. FRLSZH Cable	250.00	Mtr	₹ 2,416.00	₹ 6,04,000.00
99	R2-ME-2-3a-y	3.5C x 70 Sq.mm Cu. FRLSZH Cable	120.00	Mtr	₹ 3,419.00	₹ 4,10,280.00
100	R2-ME-2-3a-ac	3.5C x 185 Sq.mm Cu. FRLSZH Cable	200.00	Mtr	₹ 9,510.00	₹ 19,02,000.00
101	R2-ME-2-3a-ad	3.5C x 240 Sq.mm Cu. FRLSZH Cable	50.00	Mtr	₹ 12,215.00	₹ 6,10,750.00
102	R2-ME-2-3a-ae	3.5C x300 Sq.mm Cu. FRLSZH Cable	200.00	Mtr	₹ 15,216.00	₹ 30,43,200.00
		Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of Double compression cable glands, stripping of cable insulation, supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, G.I nut - bolts and G.I washers , consumables and other hardware materials as required to make the installation complete, are in the scope. All G.I Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core & accessories				
103	R2-ME-2-12-g	3C x 2.5 Sq.mm	10.00	Nos	₹ 113.00	₹ 1,130.00
104	R2-ME-2-12-h	3C x 4 Sq.mm	20.00	Nos	₹ 172.00	₹ 3,440.00
105	R2-ME-2-12-i	3C x 6 Sq.mm	500.00	Nos	₹ 176.00	₹ 88,000.00
106	R2-ME-2-12-k	3C x 10 Sq.mm	1.00	Nos	₹ 187.00	₹ 187.00
107	R2-ME-2-12-l	3C x 16 Sq.mm	10.00	Nos	₹ 332.00	₹ 3,320.00
108	R2-ME-2-12-p	4C x 2.5 Sq.mm	50.00	Nos	₹ 173.00	₹ 8,650.00
109	R2-ME-2-12-q	4C x 4 Sq.mm	225.00	Nos	₹ 179.00	₹ 40,275.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
110	R2-ME-2-12-r	4C x 6 Sq.mm	70.00	Nos	₹ 186.00	₹ 13,020.00
111	R2-ME-2-12-s	4C x 10 Sq.mm	20.00	Nos	₹ 199.00	₹ 3,980.00
112	R2-ME-2-12-t	4C x 16 Sq.mm	50.00	Nos	₹ 349.00	₹ 17,450.00
113	R2-ME-2-12-u	4C x 25 Sq.mm	38.00	Nos	₹ 360.00	₹ 13,680.00
114	R2-ME-2-12-v	3.5C x 35 Sq.mm	38.00	Nos	₹ 363.00	₹ 13,794.00
115	R2-ME-2-12-w	3.5C x 50 Sq.mm	18.00	Nos	₹ 465.00	₹ 8,370.00
116	R2-ME-2-12-x	3.5C x 70 Sq.mm	6.00	Nos	₹ 602.00	₹ 3,612.00
117	R2-ME-2-12-ab	3.5C x 185 Sq.mm	6.00	Nos	₹ 2,110.00	₹ 12,660.00
118	R2-ME-2-12-ac	3.5C x 240 Sq.mm	10.00	Nos	₹ 2,797.00	₹ 27,970.00
119	R2-ME-2-12-ad	3.5C x 300 Sq.mm	26.00	Nos	₹ 3,805.00	₹ 98,930.00
120	R2-ME-2-12-ae	3.5C x 400 Sq.mm	1.00	Nos	₹ 5,759.00	₹ 5,759.00
121	R2-ME-2-12-af	6C x 1.5Sq.mm	10.00	Nos	₹ 179.00	₹ 1,790.00
122	R2-ME-2-12-ag	6C x 2.5 Sq.mm	10.00	Nos	₹ 183.00	₹ 1,830.00
		1.8 Modular switches and Accessories				
123	RBH18-PWD-1-8-1	Supplying and erecting modular type switch 6A / 10A ISI mark approved make duly erected on provided plate and box with wiring connections complete.	1,000.00	Nos	₹ 89.00	₹ 89,000.00
124	RBH18-PWD-1-8-7	Supplying and erecting modular type switch one way 16 / 20 A, ISI mark, approved make duly erected on provided plate and box with wiring connections complete with neon indicator.	1,550.00	Nos	₹ 146.00	₹ 2,26,300.00
125	RBH18-PWD-1-8-10	Supplying and erecting modular type 3 pin 6A multi socket with safety shutter ISI mark approved make duly erected on provided plate and box with wiring connections complete.	250.00	Nos	₹ 116.00	₹ 29,000.00
126	RBH18-PWD-1-8-11	Supplying and erecting modular type 3 pin 6 / 16A multi socket with safety shutter ISI mark approved make duly erected on provided plate and box with wiring connections complete.	1,000.00	Nos	₹ 179.00	₹ 1,79,000.00
127	RBH18-PWD-1-8-37	Supplying and erecting unbreakable concealed type modular switch box with double mounting plate for 3 module duly erected flush to wall with required chiselling and finishing with cement mortar / POP as per required to match the background in an approved manner.	1,000.00	Nos	₹ 273.00	₹ 2,73,000.00
		MAINS AND SUBMAINS WIRING, POINT WIRING WIRING FOR SUBMAINS/ CIRCUIT WIRING				
	R2-ME-3-21	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLSZH insulated copper conductor wire in surface/ recessed medium class PVC conduit as required				
128	R2-ME-3-21-a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire in 20mm Conduit	20,000.00	Mtr	₹ 116.00	₹ 23,20,000.00
129	R2-ME-3-21-b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire in 20mm Conduit	17,240.00	Mtr	₹ 159.00	₹ 27,41,160.00
130	R2-ME-3-21-c	2 X 4 sq. mm + 1 X 4 sq. mm earth wire in 25mm Conduit	12,600.00	Mtr	₹ 231.00	₹ 29,10,600.00
131	R2-ME-3-21-d	2 X 6 sq. mm + 1 X 6 sq. mm earth wire in 25mm Conduit	100.00	Mtr	₹ 317.00	₹ 31,700.00
132	R2-ME-3-21-k	4 X 4 sq. mm + 2 X 4 sq. mm earth wire in 38mm Conduit	50.00	Mtr	₹ 431.00	₹ 21,550.00
	R2-ME-3-42	Point wiring by using FRLSZH insulated copper conductors (along with same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose) using PVC CONDUIT				
133	R2-ME-3-42-a	Light /Fan / Ex. fan Points	200.00	Each Pt.	₹ 799.00	₹ 1,59,800.00
134	R2-ME-3-42-k	Group Control Point Wiring 4-8 Points Controlled by One 15 A SP Switch	124.00	Each Pt.	₹ 419.00	₹ 51,956.00
135	R2-ME-3-42-j	5A/6A - 3/5 Pin Plug On Board	76.00	Each Pt.	₹ 188.00	₹ 14,288.00
136	R2-ME-3-42-i	15 / 5 A / 6 A Combined Power Plug Socket Point with Fuse and Indicating Lamp, One 15 Amp SP Switch	76.00	Each Pt.	₹ 1,346.00	₹ 1,02,296.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
137	R2-ME-3-42-b	2/3 Pin Independent Plug (IP)	126.00	Each Pt.	₹ 842.00	₹ 1,06,092.00
	R2-ME-3-45	Point wiring by using FRLSZH insulated copper conductors (along with same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose) using CONCEALED MANNER (WITH PVC CONDUIT PIPES, M.S. BOXES ETC.) POINTS				
138	R2-ME-3-45-a	Light /Fan / Ex. fan Points	5,500.00	Each Pt.	₹ 881.00	₹ 48,45,500.00
139	R2-ME-3-45-b	2/3 Pin Independent Plug (IP)	2,000.00	Each Pt.	₹ 909.00	₹ 18,18,000.00
140	R2-ME-3-45-i	15 / 5 A / 6 A Combined Power Plug Socket Point with Fuse and Indicating Lamp, One 15 Amp SP Switch	1,200.00	Each Pt.	₹ 1,458.00	₹ 17,49,600.00
141	R2-ME-3-45-j	5A/6A - 3/5 Pin Plug On Board	2,000.00	Each Pt.	₹ 193.00	₹ 3,86,000.00
142	R2-ME-3-45-k	Group Control Point Wiring 4-8 Points Controlled by One 15 A SP Switch	3,000.00	Each Pt.	₹ 453.00	₹ 13,59,000.00
143	R2-ME-3-45-c	Bell Point with Bell / Buzzer & 1 Bell Push	250.00	Each Pt.	₹ 1,245.00	₹ 3,11,250.00
144	R2-ME-3-45-d	Bell Point With Bell / Buzzer with 1 Bell Push & 1 Indicator	250.00	Each Pt.	₹ 1,307.00	₹ 3,26,750.00
		Point wiring by using FRLSZH insulated copper conductors (alongwith same size of FRLSZH insulated copper conductor for earthing & 3 plate ceiling rose) : PVC conduit concealed with modular switches & FRLSZH wires.				
145	R2-ME-3-26-b	3/5 Pin Independent Plug (IP) Concealed Manner with Modular switches & FRLSZH wires	700.00	Each Pt.	₹ 992.00	₹ 6,94,400.00
146	R2-ME-3-26-c	5A/6A - 3/5 Half Plug Concealed Manner with Modular switches & FRLSZH wires	1,620.00	Each Pt.	₹ 278.00	₹ 4,50,360.00
		16SWG GI Junction Box Complete with Earthing terminal, Interconnection & wiring				
		16 SWG G I Junction Box of various sizes For loop in loop out cables. Junction box shall have suitable no. of knock out for incoming & outgoing cables. Cables shall be terminated in 10A heavy duty connector. Cost of the connector shall be included in the cost of Junction box. Colour shade shall be RAL 7032 Siemens gray as per IS 5. (IP55)				
147	R2-ME-1-20-e	100mm x 100mm x 50mm size GI Junction box with knock out & 1 No. 5Amp. SP switch & 5 Amp. Three Pin Socket for local Isolation	50.00	Nos	₹ 131.00	₹ 6,550.00
		MAINS : - for three - single phase industrial sockets / D.B. to D.B. / panel to UPS and UPS to UPS DB				
		1.1 KV GRADE COPPER FLEXIBLE WIRE WITH SINGLE PVC INSULATED "METER LEADS" COMPLETE WITH FLEXIBLE PVC CONDUIT, END TERMINATIONS, CLIPPINGS ETC.:				
148	R2-ME-1-10-c	1.1 kV grade 2 nos. (P+N) copper conductor flexible cable of area 4.0 sq mm and 1no. (E) 2.5 sq. mm copper cable for 30/32 Amp. single phase switch.	10.00	Mtr	₹ 458.00	₹ 4,580.00
149	R2-ME-1-10-d	1.1 kV grade 4 nos. (3P+N) copper conductor flexible cable of area 6.0 sq mm and 1no. (E) 2.5 sq. mm copper cable for 30 /32 Amp. three phase switch.	250.00	Mtr	₹ 848.00	₹ 2,12,000.00
150	R2-ME-1-10-e	3(PH) nos. single core Cu PVC insulated flexible cable of 25 Sq.mm. for phases & 1 single core Cu PVC insulated flexible cable for neutral of 10 Sq.mm. for 63 Amp TPNSS switch.	200.00	Mtr	₹ 1,468.00	₹ 2,93,600.00
151	RBH18-PWD-1-1-9	Supplying & erecting I.S.I. mark Rigid P.V.C. conduit 25 mm. dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC, para no. 1.2.1	5,000.00	Mtr	₹ 132.00	₹ 6,60,000.00
152	RBH18-PWD-1-1-10	Suppling & laying Rigid PVC conduit 25 mm Dia with necessary accessories in RCC work/false ceiling/false flooring as per specification No. WG-MA/CC, para no. 1.2.1	1,000.00	Mtr	₹ 107.00	₹ 1,07,000.00
153	RBH18-PWD-1-1-11	Supplying & erecting I.S.I. mark Rigid P.V.C. conduit 32 mm. dia. with necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC, para no. 1.2.1	1,000.00	Mtr	₹ 169.00	₹ 1,69,000.00
154	RBH18-PWD-1-2-2	Supplying and erecting UPVC reinforced flexible conduit 20 mm in dia. conforming to I.S. and approved make with required number of couplings, PVC bushes, check nuts etc. complete.	30.00	Mtr	₹ 89.00	₹ 2,670.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
155	RBH18-PWD-1-2-3	Supplying and erecting UPVC reinforced flexible conduit 25 mm in dia. conforming to I.S. and approved make with required number of couplings, PVC bushes, check nuts etc. complete.	60.00	Mtr	₹ 101.00	₹ 6,060.00
156	RBH18-PWD-1-2-6	Supplying and erecting UPVC reinforced flexible conduit 50 mm in dia. conforming to I.S. and approved make with required number of couplings, PVC bushes, check nuts etc. complete.	50.00	Mtr	₹ 194.00	₹ 9,700.00
		General indoor fittings (FG-IDF)				
157	R2-ME-4-34-a	1X 18W	220.00	Nos	₹ 538.00	₹ 1,18,360.00
158	R2-ME-4-34-b	2X 18W	60.00	Nos	₹ 1,076.00	₹ 64,560.00
159	R2-ME-4-32-b	SITC of Downlighter/Wall mounted LED:-9-10 W	250.00	Nos	₹ 585.00	₹ 1,46,250.00
160	R2-ME-4-32-c	SITC of Downlighter/Wall mounted LED:- 12 -13W	1,000.00	Nos	₹ 698.00	₹ 6,98,000.00
161	R2-ME-4-32-d	SITC of Downlighter/Wall mounted LED:-13-18 W	50.00	Nos	₹ 754.00	₹ 37,700.00
		Aviation Light Fittings				
162	RBH18-ELEC-FA-58	Supplying & erecting aviation obstruction light consisting of yellow painted die-cast aluminium alloy housing, red coloured polycarbonate dome and accessories suitable for Twin light on provided bracket complete.	2.00	Nos	₹ 6,058.68	₹ 12,117.36
		Accessories for Fans (FG-FN)				
163	R2-ME-4-12-s	Fan safety rope/ Fan wire.	500.00	Nos	₹ 407.00	₹ 2,03,500.00
		FANS (SP-ME-TS-28)				
164	R2-ME-4-12-a	Ceiling fan of 600 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	10.00	Nos	₹ 2,508.00	₹ 25,080.00
165	R2-ME-4-12-c	Ceiling fan of 1050 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	10.00	Nos	₹ 2,508.00	₹ 25,080.00
166	R2-ME-4-12-d	Ceiling fan of 1200 mm sweep with all accessories including Electronic Regulator for completing installation as per specification.	500.00	Nos	₹ 2,508.00	₹ 12,54,000.00
167	R2-ME-4-12-i	Exhaust fan of 305mm sweep, 900/1400RPM, with 750 CFM free air delivery, AC 230V/415V , 50 Hz, single phase / three phase complete with all necessary accessories for completing installation as per specification.	250.00	Nos	₹ 3,209.00	₹ 8,02,250.40
		LIGHTING FIXTURES, INVERTERS, FANS, WATER HEATERS.				
		T-5 Fixtures (SP-ME-TS-20)				
168	R2-ME-4-31-c	Garden Light Luminaire Bollard Type.	30.00	Nos	₹ 6,295.00	₹ 1,88,850.00
		S' TYPE HOOK FOR CEILING FANS:				
169	R2-ME-4-15-b	S' type M.S. fan hook fabricated from suitable dia. M.S. rod for fixing ceiling fan by using pair of Anchor fastener.	100.00	Nos	₹ 229.00	₹ 22,900.00
		FIXING OF CEILING FANS WITH EXTENDED 1/2" G.I./ M.S. PIPE WITH SHACKLE MOUNTING ETC. WITH PAINTING:				
170	R2-ME-4-17	Fixing of Ceiling fans with MS down rod, painting etc as required for completing installation as per specification				
171	R2-ME-4-17-c	Above 1 mtr. to 1.5 Mtr.	100.00	Set	₹ 439.00	₹ 43,900.00
		ELECTRONIC SIREN 220V A.C. AUDIBLE RANGE:				
172	R2-ME-4-18	Electronic siren, single phase 230V AC,6000rpm , horizontal mounting , with weather shade with complete installation as per specification.				
173	R2-ME-4-18-b	Audible range 1.0 km.	1.00	Nos	₹ 6,985.00	₹ 6,985.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
174	R2-ME-4-20-b	Standard Industrial type Fly killer with M.S. body, 4 X 20W tube and approx. area covered: 2000 sq.ft.	2.00	Nos	₹ 4,992.00	₹ 9,984.00
175	R2-ME-4-34-e	LED Bulkhead fitting	60.00	Nos	₹ 1,162.00	₹ 69,720.00
		HIGHMAST, POLES & ACCESSORIES				
		Poles : (As per IS 2713 - Part II 1980, Swedged pole made from steel of ultimate steel tensile 410 Mpa (42 Kg/Sq.mm.))(SP-ME-TS-13)				
176	R2-ME-10-5-e	Providing & erecting 7 m high (clear height) galvanized OCTAGONAL pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification	10.00	Nos	₹ 53,892.00	₹ 5,38,920.00
177	R2-ME-10-5-f	Providing & erecting 8 m high (clear height) galvanized OCTAGONAL pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification	5.00	Nos	₹ 66,258.00	₹ 3,31,290.00
178	R2-ME-10-5-g	Providing & erecting 9 m high (clear height) galvanized OCTAGONAL pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification	10.00	Nos	₹ 78,928.00	₹ 7,89,280.00
		Brackets				
179	R2-ME-10-6-a	Providing & erecting single arm standard bracket 1000MM long made up of 40 NB GI pipe suitable for octagonal pole of having top dia 70 MM as per specification	10.00	Nos	₹ 7,485.00	₹ 74,850.00
180	R2-ME-10-3-b	Providing & erecting double arm standard bracket 1000MM long made up of 40 NB GI pipe suitable for octagonal pole of having top dia 70 MM as per specification	10.00	Nos	₹ 5,861.00	₹ 58,610.00
		C.I.Junction Boxes				
		Providing, fixing and connecting weather proof pole mounting cast iron box, hinged door with locking arrangement, complete with MCB cutouts, terminal block mounting arrangement etc. Box shall be duly painted in approved manner . Cost of painting is included in cost of C.I. Box.				
181	R2-ME-10-4-b	Cast Iron Junction box complete with 2way terminal or connector block and 6A SP MCB. Box size shall not be less than 6" x 5" (150 mm x 125 mm)	5.00	Nos	₹ 4,884.00	₹ 24,420.00
182	R2-ME-10-4-c	Cast Iron Junction box complete with c 2way terminal or connector block and 6A SP MCB. Box size shall not be less than 8" x 5" (200 mm x 125 mm.)	10.00	Nos	₹ 6,056.00	₹ 60,560.00
		LED Outdoor Fittings (FG-ODF/LED)				
183	R2-ME-4-27-e	SITC of LED Street Light fittings:- 70-90 W	10.00	Nos	₹ 5,774.00	₹ 57,740.00
184	R2-ME-4-27-b	SITC of LED Street Light fittings:- 24-36 W	5.00	Nos	₹ 2,223.00	₹ 11,115.00
185	R2-ME-4-27-c	SITC of LED Street Light fittings:- 36-48 W	10.00	Nos	₹ 4,071.00	₹ 40,710.00
186	R2-ME-4-29-a	SITC of LED Post top Lantern/ Handi type- 50 W with Pole	10.00	Nos	₹ 9,343.00	₹ 93,430.00
187	BAH-ELEC-FA-46	SITC of Shrub uplighter 8 to 13 watt led waterproof with all accessories etc.	15.00	Nos	₹ 3,500.00	₹ 52,500.00
188	BAH-ELEC-FA-47	SITC of Tree uplighter 8 to 13 watt led waterproof with all accessories etc.	15.00	Nos	₹ 3,800.00	₹ 57,000.00
189	RBH18-ELEC-FA-62	Supply, Installation testing and commissioning of 40W LED 2' x 2' ft, Direct - Indirect Light fixture	10.00	Nos	₹ 7,021.48	₹ 70,214.80
		EARTHING, LIGHTNING PROTECTION.				
		Earthing (SP-ME-TS-37)				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
190	R2-ME-7-1-d	600 X 600 X 3.15 mm Copper Plate , 3000mm dip with suitable size cu strip earth pit as per IS 3043. The earth pit shall be provided with watering pipe (Class B) with wire messed funnel, 12 SWG cu wire upto chamber, disconnecting links with 600 x 600 mm (clear) RCC chamber & 3mm thick heavy duty CI chequered plate cover with hinge. Bentonite shall be provided for earth pits. Excavation, backfilling, removal of excess soil is included in the scope	8.00	Nos	₹ 23,434.00	₹ 1,87,472.00
191	R2-ME-7-1-c	Earthing station with 600 mm x 600 mm x 6 mm galvanised iron plate & 50 mm dia. G.I. pipe, 3000mm long GI pipe (Class B or better) earth pit as per IS 3043. The earth pit shall be provided with watering pipe (Class B) with wire messed funnel, 25x3 GI strip/ / 2X8SWG G.I. wire up to chamber (wire or strip size as per fault level), disconnecting links with 600 x 600 mm (clear) RCC chamber & heavy duty 3mm thick CI chequered plate cover with hinge & stainless steel bolts. Bentonite/ Charcol & Salt shall be provided for earth pits. Excavation, back filling, removal of excess soil is included in the scope	18.00	Nos	₹ 17,789.00	₹ 3,20,202.00
		Test links				
		Supply and installation of following size Test Links with required wiring and other accessories to complete the work.				
192	R2-ME-7-3-c	25 x 3 mm Cu (length : 300 mm)	25.00	Nos	₹ 234.00	₹ 5,850.00
193	R2-ME-7-3-e	50 x 6 mm GI (length : 300 mm)	10.00	Nos	₹ 86.00	₹ 860.00
		Earthing Continuity Conductors				
		Supply & installation of Earth conductor of the following sizes to be cleated on wall / columns with nuts & bolts or laid in cable tray / buried in ground including cutting, drilling, tapping, jointing by welding, connecting to equipments, painting to welded portion by black bitumen paint and with all necessary GI hardware & accessories to complete the work				
194	R2-ME-7-4-a	25 x 3mm Tinned copper	50.00	Mtr	₹ 780.00	₹ 39,000.00
195	R2-ME-7-4-c	25 x 6mm Tinned copper	25.00	Mtr	₹ 1,568.00	₹ 39,200.00
196	R2-ME-7-4-e	25 x 3mm GI	300.00	Mtr	₹ 49.00	₹ 14,700.00
197	R2-ME-7-4-f	25 x 6mm GI	2,000.00	Mtr	₹ 97.00	₹ 1,94,000.00
198	R2-ME-7-4-g	50 x 6mm GI	350.00	Mtr	₹ 195.00	₹ 68,250.00
199	R2-ME-7-4-k	Bare Copper Conductor size 8 SWG	400.00	Mtr	₹ 125.00	₹ 50,000.00
200	R2-ME-7-4-m	Bare G.I. Conductor size 8 SWG	1,500.00	Mtr	₹ 9.00	₹ 13,500.00
201	RBH18-PWD-1-3-4	Supplying & erecting mains with 2x1.5 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	50.00	Mtr	₹ 44.00	₹ 2,200.00
202	RBH18-PWD-1-3-6	Supplying & erecting mains with 2x2.5 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	25.00	Mtr	₹ 66.00	₹ 1,650.00
203	RBH18-PWD-1-3-8	Supplying & erecting mains with 2x4 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	1,000.00	Mtr	₹ 89.00	₹ 89,000.00
204	RBH18-PWD-1-3-10	Supplying & erecting mains with 2x6 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	50.00	Mtr	₹ 125.00	₹ 6,250.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
205	RBH18-PWD-1-3-12	Supplying & erecting mains with 2x10 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG- MA/BW	38.00	Mtr	₹ 212.00	₹ 8,056.00
206	RBH18-PWD-1-3-20	Supplying & erecting mains with 3x10 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG	25.00	Mtr	₹ 313.00	₹ 7,825.00
207	RBH18-PWD-1-3-21	Supplying & erecting mains with 4x10 sq.mm F.R.L.S copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WGMA/BW (Note : Derived from item (1-3-12))	50.00	Mtr	₹ 618.00	₹ 30,900.00
		CABLES, EXCAVATION, G.I. CABLE TRAYS & ACCESSORIES, CABLE JOINTS, CABLE PROTECTION PIPE.				
		Providing & laying Hume pipe across road or below the plinth beams and buried cable protection				
		Supply and laying of Heavy duty RCC Hume pipe for road crossing, below plinth beam of following size as diameter.				
208	R2-ME-2-19-b	150mm Dia.	50.00	Mtr	₹ 611.00	₹ 30,550.00
209	R2-ME-2-19-d	300mm Dia.	50.00	Mtr	₹ 1,113.00	₹ 55,650.00
		Supplying & laying I.S.I. mark 'B' class GI Pipe for surface/ under ground cable protection				
210	R2-ME-2-21-f	50 mm dia.	50.00	Mtr	₹ 765.00	₹ 38,250.00
211	R2-ME-2-21-g	65 mm dia.	20.00	Mtr	₹ 969.00	₹ 19,380.00
212	R2-ME-2-21-h	80 mm dia.	20.00	Mtr	₹ 1,245.00	₹ 24,900.00
213	R2-ME-2-21-i	100 mm dia.	25.00	Mtr	₹ 1,775.00	₹ 44,375.00
		Supply & Laying of double wall corrugated (DWC) pipes of HDPE for underground cable protection				
	R2-ME-2-22	Supply & Laying of double wall corrugated (DWC) pipes of HDPE for underground cable protection as per IS 14930 Part II. With necessary connecting socket/couplings, tees of some material at required depth up to 900 mm below road ground surface. backfilling of with light ramming is included in the scope.				
214	R2-ME-2-22-a	50 mm OD / 38 mm I.D.	100.00	Mtr	₹ 226.00	₹ 22,600.00
215	R2-ME-2-22-g	145 mm OD / 126 mm I.D.	25.00	Mtr	₹ 686.00	₹ 17,150.00
216	R2-ME-2-22-j	200 mm OD / 175 mm I.D.	25.00	Mtr	₹ 1,108.00	₹ 27,700.00
		Sheet Moulding compound (SMC) Junction Box, for Outdoor Use				
217	R2-ME-1-21-a	SMCJB - 1414, Hinged cover, Size 170 x 170 x 105mm	20.00	Nos	₹ 1,253.00	₹ 25,060.00
218	RBH18-PWD-6-1-20	Supplying and erecting Iron work consisting of Various sections of MS and including Plates, Chequered Plates, Rods, Bars, MS pipes, etc. for panel board or any other purposes complete with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority	150.00	KG	₹ 135.00	₹ 20,250.00
		Lightning Protection System				

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
219	BAH-ELEC-FA-48	Supply, Installation testing and commissioning of Vertical Aluminum Air terminal of Length 1000 mm along with the round gun metal base plate and 3+2 mtr Gi pipe to make it of 5 mtr.	6.00	Nos	₹ 10,580.00	₹ 63,480.00
220	BAH-ELEC-FA-49	Supply, Installation testing and commissioning of Vertical aluminium Lighting Arrester of 16 mm dia, 1000 mm long with Gun Metal base plate	8.00	Nos	₹ 5,500.00	₹ 44,000.00
221	BAH-ELEC-FA-50	Supply, Installation testing and commissioning of 8 mm round aluminium conductor for horizontal lightning protection - run in roof.	250.00	Mtr	₹ 200.00	₹ 50,000.00
222	BAH-ELEC-FA-51	Supply, Installation testing and commissioning of roof conductor holder for 8 mm round aluminium conductor made of Gun Metal for horizontal installation. The distance between each holder should be min of 1 mtr.	250.00	Nos	₹ 150.00	₹ 37,500.00
223	BAH-ELEC-FA-52	Supply, Installation testing and commissioning of T connector for connecting of 8 mm Al round conductor . The connector should be of Gun Metal with SS nuts and bolt.	50.00	Nos	₹ 425.00	₹ 21,250.00
224	BAH-ELEC-FA-53	Supply, Installation testing and commissioning of Cross connector for connecting of 8 mm Al round conductor . The connector should be of Gun Metal with SS nuts and bolt.	25.00	Nos	₹ 435.00	₹ 10,875.00
225	BAH-ELEC-FA-54	Supply, Installation testing and commissioning of Expansion piece along with connector to compensate the expansion of round 8 mm Al conductor when temperature variation . Connection should be in every 20 mtr.	15.00	Nos	₹ 490.00	₹ 7,350.00
226	BAH-ELEC-FA-55	Supply, Installation testing and commissioning of GLUE-is used to fix roof conductor holder on roof	35.00	Nos	₹ 350.00	₹ 12,250.00
227	BAH-ELEC-FA-56	Supply, Installation testing and commissioning of 8 mm round aluminium conductor as a down conductor mounted in the surface of wall which will carry the lightning current to earth pit.	1,300.00	Mtr	₹ 135.00	₹ 1,75,500.00
228	BAH-ELEC-FA-57	Supply, Installation testing and commissioning of Down conductor holder for 8 mm round aluminium conductor of min distance between the wall to the conductor will be of 85 mm. The distance between each holder should be min of 1 mtr.	1,300.00	Nos	₹ 145.00	₹ 1,88,500.00
229	BAH-ELEC-FA-58	Supply, Installation testing and commissioning of straight connector for connecting of 8 mm Al round conductor . The connector should be of Gun	20.00	Nos	₹ 390.00	₹ 7,800.00
230	BAH-ELEC-FA-59	Supply, Installation testing and commissioning of 6 digit lightning strike counter.	1.00	Nos	₹ 7,300.00	₹ 7,300.00
231	BAH-ELEC-FA-60	Supply, Installation testing and commissioning of Test Joint Point for 8 mm round aluminium conductor , the size should be of 25 x 3 x 150 mm copper in ABS boxes.	15.00	Nos	₹ 3,450.00	₹ 51,750.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
232	BAH-ELEC-FA-61	Supply, Installation testing and commissioning of UL LISTED low carbon high tensile steel rod with copper coating of min 254 micron JK Chemrode -JK0110 CBR the dia should be 25.4 mm with length of 10 feet (3000 mm) . The rod shall be as per IEC 62561-2 and approved by UL 467. The rod shall be tested fromCPRI lab for current discharge 50kA peak. - JK0110CBR The Chemrode shall be surrounded with 25 kg (2 bag) of Earth enhance materiel JK Reslow according to IEC 62561-7 and the Chemical resistance value shall not increase more then 0.067 Ωm along with earth pit chamber made up polyplastic. Size of -254x330x260 MM earth pit chamber cover should be tested and certified for 9tonne load bearing capacity from any central government lab (national test house Gaziabad	15.00	Set	₹ 8,350.00	₹ 1,25,250.00
233	BAH-ELEC-FA-62	Supply, Installation testing and commissioning of GI STRIP (25X6 MM) - For earthing interconnection	200.00	Mtr	₹ 180.00	₹ 36,000.00
234	R2-ME-4-11-f	Inverter of 10KVA,single phase input and output with Tubular Battery(12X10) 200 AH Duration 4 Hrs.	1.00	Nos	₹ 3,50,137.00	₹ 3,50,137.00
	DG SET					
235	R2-ME-6-17-o	250kVA DG Set	1.00	Nos	₹ 19,04,666.00	₹ 19,04,666.00
236	R2-ME-6-18-p	250kVA	1.00	Nos	₹ 2,07,560.00	₹ 2,07,560.00
TOTAL AMOUNT HT & LT ELECTRICAL WORKS (In Rs.)						₹ 6,12,83,969.08
Say						₹ 6,12,83,970.00

MUNICIPAL CORPORATION OF GREATER MUMBAI

PROPOSED BMC GENERAL HOSPITAL & STAFF QUARTERS

On Plot bearing CTS No. 11A/4,Chandivali, Sangharsha Nagar, Kurla 400072

BILL OF QUANTITIES ELEVATOR WORKS - RESIDENTIAL BUILDING

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
	FAIR ITEM	<p>SITC of Electric Traction Passenger Lift with</p> <ul style="list-style-type: none"> · Rated capacity :- 16 Passenger/1088Kg · Floors :- G+7 floor (8 Stops/8 Landings) · Travel :- 21 to 29.4 mtrs · Location of Lift Machine:- MR/MRL · Rated speed :- 1.5mps VS · Car/Landing door clear opening of 1000mm wide x 2000 mm high · Clear Car size ofmm wide xmm deep x 2250mm high · Lift shaft available having clear size ofmm wide xmm deep,.....mm Pit depth,mm Overhead. · Doors type :- COPO/TOPO Doors with frame made from SS 304 grade solid(non-cladded) sheet of 1.5mm thick in hairline finish for car and all landing doors with SS door architraves/frames The lift doors shall have minimum 1hour fire rating (with submission of necessary valid test certificate issued by NABL accredited or Independent test laboratory). · Lift car enclosure made from SS 304 grade solid (non-cladded) sheet of 1.5mm, thick with hairline finish with frame made from MS girders, bracing of adequate size with minimum safety factor of 5, with Toe Guard Apron, with necessary false ceiling with adequate LED lights, blower/fan for ventilation & SS chequered plate flooring, handrails, mirror, emergency light etc. The lift car interior design shall be done as per the directions of engineer in charge. · COP with SS face plate having metallic push buttons with Braille code & luminous indicator around button with FPI, scrolling UP/DN LED indicator & with / without attendant key switch, OWD with audio-visual alarm, VAS in Marathi, Hindi & English with intercom system with telephone instrument in Lift car, LMR & FCC/ground floor. · LOP with SS face plate having recess/surface push button box for all landings with scrolling UP/DN LED indicator having metallic push buttons with Braille code & luminous indicator around button with CPI, Lift car arrival & next travel direction audio-visual indication at all landings. · Lift controller of simplex full collective based on microprocessor/ PLC with VVVF Drive having closed loop control svstem. with IBMS compatible havina necessary port. The controller shall have necessary Protections 	6.00	Nos	₹ 27,83,302	₹ 1,66,99,812.00

SR.NO	REF. CODE	DESCRIPTION	QTY	UNIT	S/I/T/C RATE	S/I/T/C TOTAL AMOUNT
1		<p>such as overcurrent, overvoltage, over speed, overheat for all devices including lift motor and travel direction protection, protection for phase loss at input or output etc. ,various operation modes such as maintenance, change direction by attendant, full load bypass, VIP call operation, self levelling operation, call cancel facility, auto return to home landing, fireman evacuation operation, earthquake operation, door open/close operation from COP etc. The system can record information for minimum 30 latest faults, with real-time clock management and handheld keypad with LCD screen for view and setting of parameters, The control panel duly wired with proper size & strength, copper wire for power & control circuit, with provision for addition of floor/control card & allied accessories control panel having enclosure of 1.5mm CRCA sheet with powder coating with IP54 Protection class.</p> <ul style="list-style-type: none"> · ARD complete with necessary SMF VRLA batteries. · Fireman controller having fireman switch at fire Landing. · CCTV surveillance system comprises of 2 nos minimum 2.0MP FHD IP based vandal proof Dome camera in lift car & in LMR/inside lift shaft top aimed on Lift machinery & controller with NVR kept in LMR/FCC with HDR data backup for min. 90 days with min. 20" FHD TV monitor, to be kept in FCC/LMR as directed by Engineer In Charge. · Lift Machine of Gearless PMSM of suitable kW with duty cycle of minimum 120 starts/hr (with submission of necessary valid test certificate issued by NABL accredited or Independent test laboratory), with Traction pulley, OSG, electromagnetic brakes, entire assembly mounted on adequate size girders duly fixed on LMR floor/ shaft walls complete with main/diverter traction sheaves, suspension wire ropes/belts of adequate size & strength. · Other mechanical parts such as 'T' section adequate size guide rails for car & counter weight with brackets fasteners, counter weight frame with necessary blocks, buffers with necessary support arrangement, MS pit ladder etc. erected with necessary steel work. · Minor civil work such as alteration work if any necessary for erection of landing door frames and it's accessories e.g. sill, header, hole pass etc complete with plaster finish, civil work for erection buffers, erection of lift machinery, adequate size core cuts if required & scaffolding for erecting guide rails, providing and fixing steel girders/RCC work having adequate strength for mounting and hoisting lift machine etc. complete 				
2	FAIR ITEM	For Lift having 900mm wide x 2000mm high clear entrance in 1.5mm thick SS 304 grade solid(non-cladded) landing door [Two panel], this includes all necessary accessories like LOP's with UP/DN buttons-arrows-indicators, extension of guide rails, shaft wiring with trunking, travelling cables, main hoisting ropes/belts, & OSG rope landing doors with all accessories etc. necessary for the normal safe functioning of lift installation complete.	72.00	Floors	₹ 1,52,608	₹ 1,09,87,776.00
TOTAL AMOUNT ELEVATORS (In Rs)						₹ 2,76,87,588.00