

Issued to: _____

BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM :: HYDERABAD-32
TOWNSHIP ADMINISTRATION

TENDER DOCUMENTS (PRICE BID)

**Name of the work : Additional electrical points and maintenance activities to BHEL General Hospital,
Borewells, NRSP & STDP.**

Tender Notice : HY/TA/E/OT-02/2013-14, Dt. 13.08.2013; Item No. 03

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1. Schedule - A : Schedule of rates and approximate quantities

ADDRESS :

PHONE NO. : _____

E-mail : _____

SCHEDULE - 'A'

Additional electrical points and maintenance activities to BHEL General Hospital, Borewells, NRSP & STDP.

Sl. No.	Description	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
	POINT WIRING				
1	Supply & Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	40	619.00	24,760.00
2	Supply & Wiring for twin control light point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Each	2	625.00	1,250.00
3	Supply and fixing 5A PVC batten holder / angle holder / 3-pin ceiling rose (ISI marked) including connection etc. as required; complete all as directed by Engineer-in-charge.	Each	54	34.00	1,836.00
	PLUG POINTS				-
4	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engineer-in-charge.	Each	10	687.00	6,870.00
5	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet (common socket) on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	12	65.00	780.00
6	Supply and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (<i>wiring separate with 2.5 sq.mm run of mains</i>)	Each	6	225.00	1,350.00

SI. No.	Description	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
7	Supply and installation of 20A SP MCB and 20A metal clad socket outlet in single phase MCB box on surface or in recess, with chained cover for the socket outlet and complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge. (<i>wiring separate with 4.0 sq.mm run of mains</i>)	Each	5	693.00	3,465.00
8	Supply of 25mm dia 1.5 mm thick medium class PVC conduit pipe along with accessories in surface / recess including cutting the wall and making good the same with required massonary work etc. as required; complete all as directed by Engineer-in-charge.	Mtr.	10	64.50	645.00
	MAINS WIRING				-
9	Supply & wiring for circuit / submain wiring alongwith earth wire with the following sizes of FR PVC insulated multistranded copper conductor, single core cable in surface / recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.				-
a)	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	Rmt.	240	131.00	31,440.00
b)	2 x 4.0 sq.mm + 1 x 4.0 sq.mm earth wire	Rmt.	150	162.00	24,300.00
c)	4 x 4.0 sq.mm + 2 x 4.0 sq.mm earth wire	Rmt.	40	268.00	10,720.00
d)	2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire	Rmt.	25	206.00	5,150.00
e)	4 x 6.0 sq.mm + 2 x 6.0 sq.mm earth wire	Rmt.	30	358.00	10,740.00
	ACCESSORIES				-
10	Supply & fixing following piano type switch / socket on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.				-
a)	240V, 6A Switch	Each	6	29.50	177.00
b)	250V, 6A 5-pin socket outlet	Each	6	35.50	213.00
c)	250V, 16A Switch	Each	5	61.50	307.50
d)	250V, 16A 6-pin socket outlet	Each	5	73.00	365.00
11	Supply & fixing following modular switch / socket on the existing modular plate & switch box including connections etc. as required; complete all as directed by Engineer-in-charge.				-
a)	240V, 6A Switch	Each	10	75.00	750.00
b)	250V, 6A 3-pin socket outlet	Each	10	96.00	960.00
c)	250V, 16A Switch	Each	10	109.00	1,090.00
d)	250V, 16A 6-pin socket outlet	Each	10	147.00	1,470.00
12	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required; complete all as directed by Engineer-in-charge.				-
a)	1 or 2 Module	Each	5	63.00	315.00
b)	3 Module	Each	5	75.00	375.00
c)	4 Module	Each	5	81.50	407.50
d)	6 Module	Each	5	98.50	492.50
e)	8 Module	Each	5	121.00	605.00
13	Supply and fixing following accessories with internal connections etc. as required; complete all as directed by Engineer-in-charge.				-

SI. No.	Description	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
a)	230V, 6A, 3-pin plug top	Each	15	43.00	645.00
b)	230V, 16A, 3-pin plug top	Each	15	60.00	900.00
c)	Buzzer bell	Each	5	70.00	350.00
d)	Ding dong bell	Each	2	118.00	236.00
	HYLAM SHEET & T.W. BOARDS				-
14	Supply, cutting and fixing of hylam sheet of 3mm thickness, preferably white on existing metal boxes as required; complete all as directed by Engineer-in-charge.	Sq.Ft	3	103.00	309.00
15	Supply and fixing of teak wood round block	Each	6	15.00	90.00
	MAINSWITCHES, FUSES & FUSE D.B.				-
16	Supply & fixing of porcelain rewirable fuse unit of reputed make; complete all as directed by Engineer-in-charge.				-
a)	32A, 415V fuse unit	Each	3	141.00	423.00
b)	63A, 415V fuse unit	Each	8	220.00	1,760.00
17	Supply, fixing and connecting of following Main Switch; complete as directed by Engineer-in-charge.				-
a)	415V, 32A Double Pole Iron Clad Main Switch	Each	1	898.00	898.00
b)	415V, 32A Triple Pole Iron Clad Main Switch	Each	2	937.00	1,874.00
c)	415V, 63A Triple Pole Iron Clad Main Switch	Each	2	2,044.00	4,088.00
	ISOLATORS, MCBs & MCB D.B.				-
18	Supplying and fixing of single pole 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	8	141.00	1,128.00
19	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				-
a)	40 amps	Each	2	245.00	490.00
b)	63 amps	Each	1	303.00	303.00
20	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				-
a)	40 amps	Each	3	554.00	1,662.00
b)	63 amps	Each	1	563.00	563.00
c)	100 amps	Each	1	709.00	709.00
21	Supply and fixing following way, horizontal type three pole & neutral, sheet steel, MCB distribution board on surface / recess complete with tinned copper bus bar, neutral busbar, earth bar, din channel, interconnections, powder painted including earthing etc as required; complete all as directed by Engineer-in-charge.				-
a)	415V, 6 way (4 + 18), single door including 80/100A four pole isolator and 5-32A MCBs complete.	Each	2	4,681.00	9,362.00

Sl. No.	Description	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
b)	415V, 8 way (4 + 24), single door including 80/100A four pole isolator and 5-32A MCBs complete.	Each	2	5,674.00	11,348.00
22	Providing earthing conforming to IS:3043 with 40 mm dia G.I. earth pipe and all accessories including excavation of pit, filling with homogenous layers of coke/charcoal & salt and providing masonry enclosure with hinged cover plate having locking arrangement and watering pipe etc.; including cost and conveyance of all materials; complete as directed by Engineer-in-charge.	Set	5	3,385.00	16,925.00
23	Providing and fixing of 4.00 mm dia copper wire on surface / in recess as required; complete all as directed by Engineer-in-charge.	Mtr.	50	87.50	4,375.00
M.S. ITEMS					-
24	Supply & fixing of angular iron frame in wall with 1/1.6 mm MS sheet on top with hinges & all four sides with screws. Necessary red-oxide / grey painting as directed by engineer in charge.	Kg.	90	112.00	10,080.00
25	Supply, fabrication & fixing of MS sheet cupboards made of sheet 1.6mm thick with single/double shutter and mechanical locking arrangements. The cupboards shall be given 2 coats of red-oxide paint and finished with necessary general purpose quick drying oil paint of suitable shade, etc. complete as directed by engineer in charge.	Kg.	180	184.00	33,120.00
LIGHTING					-
26	Supply & erection of street light fitting including street light bracket GI pipe 32mm dia and length 1.5 Mtrs. The street light fittings shall be similar to Bajaj make model No BJSLA 240 including all standard accessories and 2 Nos. 4' flourscent tubes and shall be fixed with MS flat clamps and with 15A rewirable porcelain fuse unit. as directed by engineer incharge.	Each	6	2,207.00	13,242.00
SPECIAL ITEMS FOR GENERAL HOSPITAL					-
27	supply & fixing of tubular type heating element suitable for 50 Ltrs / 90 Ltrs water heaters 3 hole /triangular disc type / non-threaded type as per samples given as directed by engineer in charge .	Each	15	440.00	6,600.00
28	Supply & fixing of thermostat 30 °C to 90 °C adjustable and suitable for 25Lts to 90Lts water heaters.	Each	8	230.00	1,840.00
29	Removal of MS rod from ceiling and fixing of 4'/5' tube light fitting to down rods with suitable MS clamps to provide ceiling rose on Teakwood round block (The work includes dismantling of fittings removal of existing gutties, clamps, bolts & nuts.) as directed by engineer in charge	Each	6	182.00	1,092.00
30	Supply of 12way - 30Amps., 500 V Bakelite with brass terminal connectors as directed by engineer incharge	Each	20	154.00	3,080.00
31	Supply of emergency lamp dry cell 6 Volts 10 AH rechargable maintenance free battery as directed by engineer in charge.	Each	20	510.00	10,200.00
32	Supply of Kettle element 1.25" dia BPC size with checkout washers 2KW - Power Pack make.	Each	1	484.00	484.00
SPECIAL ITEMS FOR BOREWELLS					-
33	supply and fixing of air break contactor 3TA11-11-0 Amps, rated current 22 Amps 1 NO + 1 NC 11 KW, 15HP, 415V (Siemens make) as directed by engineer incharge.	Each	3	2,526.00	7,578.00

Sl. No.	Description	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
34	supply and fixing of spare coils AC 50 cycles suitable for 3TA 76/3TA67/3TA21 & 3TA11 standard 415V as directed by engineer in charge.	Each	3	376.00	1,128.00
35	Supply & fixing of timer switch type TSQ-100 make Larsen & Turbo Ltd. as directed by engineer incharge	Each	10	3,652.00	36,520.00
36	Supply and fixing D.O.L /Star delta star push buttons Red /Green colour	Each	6	113.00	678.00
37	CABLES LAYING				-
38	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation (0.6 x 0.9m), sand cushioning, protective covering and refilling the trench etc as required; complete all as directed by Engineer-in-charge. (cable will be supplied by BHEL)				-
a)	Upto 35 sq. mm	Mtr.	200	167.00	33,400.00
b)	Above 35 sq. mm and upto 95 sq. mm	Mtr.	50	173.00	8,650.00
39	Supplying and fixing 50 mm dia G.I. pipe (medium class) for cable entry including bending the pipe to the required shape complete as required; complete all as directed by Engineer-in-charge.	Mtr.	20	330.00	6,600.00
40	Providing and laying in position cement concrete of 1:4:8 grade (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size) excluding the cost of centering and shuttering etc. complete all as directed by Engineer-in-charge.	Cu.M	1	3,331.25	3,331.25
41	Supply and fixing of heavy duty flange type brass cable glands with brass washers complete for the following sizes of cables :				-
a)	2/3/4 core 2.5 - 6.0 sq.mm	No.	6	41.00	246.00
b)	2/3/4 core 10 sq. mm	No.	6	72.00	432.00
c)	4 core 16 sq. mm / 3.5 core 25 sq. mm	No.	6	87.00	522.00
d)	3.5 core 35 sq.mm / 3.0 core 50 sq.mm	No.	6	91.00	546.00
e)	3.5 core 50 sq.mm	No.	6	101.00	606.00
f)	3.5 core 70 sq.mm	No.	6	126.00	756.00
g)	3.5 core 95 sq.mm	No.	6	155.00	930.00
42	Supply & fixing of crimping type copper lugs conforming to I.S. specifications for following sizes of cables including connections; complete all as directed by Engineer-in-charge.				-
a)	upto 16 sq.mm	Each	8	14.00	112.00
b)	25 sq.mm	Each	8	17.00	136.00
c)	35 sq.mm	Each	12	30.00	360.00
d)	50 sq.mm	Each	12	39.00	468.00
e)	70 sq.mm	Each	12	47.00	564.00
	TOTAL			(Rs: three lakhs seventy two thousand five hundred seventy two & paise seventy five only)	3,72,572.75

Sl. No.	Description	Unit	Qty	Rate	Amount
(1)	(2)	(3)	(4)	(5)	(6)
Sl. No.	Name of accessories	Recommended Make to be used			
1	FR PVC insulated multistranded copper conductor single core cable (1.5 / 2.5 / 4.0 / 6.0 sq.mm)	1100 Volt Grade, Flame Retardant Low Smoke Type Only. FINOLEX / L&T / HAVELLS / ANCHOR. (of suitable colour code as directed by Engineer-in-charge)			
2	PVC Conduits	Sudhakar / Avonplast / Nandi			
3	6A & 16A piano type / modular type switches & sockets, Bell push	Anchor / GM / SSK / MK			
4	Lamp Holder, 3-pin ceiling rose	Anchor / GM / SSK / MK			
5	Calling Bell	Anchor / GM / SSK / MK			
6	63A, 240V rewirable porcelain fuse unit	Anchor / GM / SSK / MK			
7	MCB Dist. Board, 5-32A SP MCBs, 63A DP isolators	Havells / Legrand / Indoasian / Standard			
8	Metallic MCB Distribution Board with Metal Clad Socket + Plug top (for Air Conditioner)	Havells / Legrand / Indoasian / Standard			
9	14.0 Sq.mm (twin core) PVC insulated, sheathed, 1100V grade Aluminium Conductor cable	Payal / Fincab / Gold / Havells			
10	Stepped type electronic fan regulator	Anchor / GM / SSK / MK			
11	Generally all materials supplied by the Contractor	standard make and ISI certified as agreed by the Engineer-in-Charge.			

Note:- The tenderers are required to quote their tender value on %age basis at excess or less or on par with estimated value.

Tender (%)	in figures	in words
Excess		
Less		
Estimate rate only		

Conditions :

1	A penalty of 0.5% of the gross value of work will be levied for every week's delay of work subject to a maximum penalty of 10% of the gross value of work.
2	The tender % age quoted by the contractor shall be inclusive of all taxes and duties other than service tax as applicable from time to time.
3	The rate quoted by the contractor shall be inclusive of all taxes (except service tax) and duties levied by Central/State Govt. organizations as well as local authorities, as applicable from time to time.
4	Service tax will be extra if applicable for this contract. Service Tax if paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the service tax by the contractor.