



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM::HYDERABAD::32
FACTORY CIVIL ENGINEERING DEPARTMENT

SCHEDULE- A

Tender Notice No:
 PROJ-EC/ELEC/OT-12/2013-14
 Dated: 04.11.2013 Item No.1

PRICE BID

Name of work: Services for machine tools & miscellaneous works-Electrical work.

S. No.	Description of the item	Unit	Qty	Rate (₹)	Amount (₹)
1	Excavation of cable trench(500x600mm)				
	i) In soil, excavation of 600mm deep and 500mm width trench, supply & spreading of sand, supply & laying of bricks & shabad stone as per IS:1255 1983 and back filling after cable laid with marking plates.	Mts	200	343.00	68,600.00
	ii) Cutting of Road, RCC & Hard rock	Mts	60	435.00	26,100.00
	iii) Supply & laying of 9" dia 2 M long RCC hume pipes at Road and Railway track crossings.	Nos	10	762.00	7,620.00
2	Shifting, Erection and Commissioning of 3 phase Fuse Distribution Board (FDB) CSFU as per site engineer instructions.				
	a) 63A, 8 way	Nos	2	2,500.00	5,000.00
	b) 32A, 12 way	Nos	6	2,500.00	15,000.00
3	Supply of Commissioning Assistance during machines & other systems commissioning.				0.00
	a) Skilled	Days	60	659.60	39,576.00
	b) Un-skilled	Days	60	579.90	34,794.00
4	Shifting and Erection of cable trays upto 600mm width.The job includes fabrication of cable tray bends wherever required as per site engineer instructions.	Mts	200	50.00	10,000.00
5	Shifting and execution of Equipment earthing with 50x6 / 25x3mm GI flat.	Mts	300	24.00	7,200.00
6	Shifting, Fabrication & Erection of BHEL free issue steel for cable tray/equipment supports etc. Scope includes supply and apply of two coat red oxide paint as per site engineer instructions.	MT	2	9,066.00	18,132.00

S. No.	Description of the item	Unit	Qty	Rate (₹)	Amount (₹)
7	Supply and Erection of Special Earth Pits for Electronic earthing with 600x600x6mm Tinned copper plate, 50mm dia 2600mm long GI pipe with holes of 1/4" dia at 4" apart at random & 2nos 25x6, 2600mm long tinned copper flat material as per drawing. The work including supply of material for alternate layers of charcoal(75kgs), salt(150kgs) and making RCC/Brick chambers with MS/Cast iron cover. Contractor shall dig 300mm depth and 200mm width trench in the soil for laying the copper cable from earth pit electrode to equipment.	Nos	5	27,000.00	1,35,000.00
8	Supply and Erection of Earth pits for Equipment body earthing with 65mm dia GI pipe Medium (class-B), 3000mm long with holes of 12mm dia at 150mm apart at random & 50x6x260mm MS Earthing plate welded to pipe as per drawing. The work including supply of material for alternate layers of charcoal, salt and making Brick/ RCC chamber, cement plastering, MS/Cast Iron cover plate, Testing & Commissioning.	Nos	8	7,492.00	59,936.00
9	Shifting and Erection of CFSU cast iron switches along with HRC fuse links and reverse cable entry box on top and cable entry box at bottom for machines.				
	a) 63A	Nos	2	910.00	1,820.00
	b) 100A	Nos	4	910.00	3,640.00
	c) 200A	Nos	4	910.00	3,640.00
	d) 315A	Nos	4	910.00	3,640.00
10	Shifting and Erection of ICTPN sheet enclosure switches with HRC fuse links for machines.				
	a)63A	Nos	2	606.00	1,212.00
	b)32A	Nos	8	413.00	3,304.00
	c)16A	Nos	10	413.00	4,130.00
11	Shifting and Erection of 3 phase, 415V stabilizer				0.00
	a) 25 to 50KVA and approx. weight 250Kgs.	Nos	2	606.00	1,212.00
	b) 60 to 100KVA and approx. weight 400Kgs.	Nos	2	606.00	1,212.00
	c) 120 to 200KVA and approx. weight 500Kgs.	Nos	3	800.00	2,400.00
12	Shifting and Erection of 3 phase, 415V Isolation Transformer.				
	a) 25 to 50KVA and approx. weight 250Kgs.	Nos	2	606.00	1,212.00
	b) 60 to 100KVA and approx. weight 400Kgs.	Nos	2	606.00	1,212.00
	c) 120 to 200KVA and approx. weight 500Kgs.	Nos	3	800.00	2,400.00

S. No.	Description of the item	Unit	Qty	Rate (₹)	Amount (₹)
13	ANNEXE LIGHTING				
	a) Supply and fixing of 250 V. 20/16 Amps power socket cum switch Roma type code 21124 and 21066 of Anchor make or North West. Fixed on suitable modular type concealed box top cover. Testing & commissioning.	Nos	5	530.00	2,650.00
	b) Supply and installation of concealed / surface PVC/MS Pipe wiring with 2.5 sq. mm PVC insulated copper wire multistrand of make Finolex / Rediant / Finecab / Havells / L&T. The wiring point for 20/16 A. power socket including 14 G./1.5sq.mm green colour copper wire for earth continuity. Independent circuit for each socket from power MCB distribution board (As per IS for wiring point) Testing and commissioning. The wiring should not be mixed with lighting pipe wiring and it should be run separately in the room / shed at a height of 2 feet from ground level or as per the site engineers instruction.	Pts	5	1,718.00	8,590.00
	c) Shifting, Assembly, Erection, Testing & Commissioning of 2x36W different types of Tube light fittings. The light fitting shall be fixed with suitable down rod, ball & socket etc and the supply of the material is in the contractor's scope .The job includes supply of 1.5sq.mm copper wire for connection between ceiling rose and TL.	Nos	20	590.00	11,800.00
	d) Fixing, connecting and testing of ceiling fan.The job includes supply of Anchor roma ceiling rose &1.5sq.mm copper wire for connection between ceiling rose and fan. Fixing of free issued electronic regulator on the Roma switch board.	Nos	10	388.00	3,880.00
	e)Supply, Erection and Testing of 230V ,12" dia(305mm), 50W, 900rpm, 1200cu.M/hr Exhaust Fans.Make: USHA/GEC/Khaitan, complete unit, wall mounting.(The job involves making suitable holes in the wall inclusive of masonry work or by making suitable MS frame above +20 ft. approximately from ground level)	Nos	2	3,095.00	6,190.00
	f)Supply and fixing of 10 Amps 250 V. SP switches for control of light fitting and fans with Roma Type code : 21011 of Anchor or North West make . Fixed on a suitable modular type concealed box with suitable top cover. Testing & commissioning.	Nos	32	282.00	9,024.00
	g) Supply and fixing of 3pin, 250 V. 10 Amps power socket cum switch with indication Roma type code 21113 and 21033 of Anchor make or North West. Fixed on suitable modular type concealed box top cover. Testing & commissioning.	Nos	15	435.00	6,525.00

S. No.	Description of the item	Unit	Qty	Rate (₹)	Amount (₹)
	h) Supply and execute the concealed / surface PVC/MS Pipe wiring with 1.5 sq. mm 660 / 1100. V. Grad PVC insulated copper wire multi strand of make Finolex / Rediant / fincab/ Havells/ L&T. In PVC pipe of suitable dia (As per IS for wiring points) with 14 G/1.5sq.mm green colour copper wire for earth continuity. Each light / fan point should be connected to three plate ceiling rose code 30090 of Roma modular type of Anchor or North West make / connector suspended duly with conduit / PVC pipe etc. Each circuit should not have more than 7 points 700 watts.	Pts	47	1,162.00	54,614.00
	i) Supply and Installation of MCB DB with MCB 415V, 8 way consisting of 10 to 20A -- 8nos MCBs on each phase , sheet enclosed, dust & vermin proof. Type KSTIL of STANDARD/ KOPP MAKE along with controlling 100A ICTPN in sheet enclosure with HRC fuses, PVC marking ferrules etc. It is to be fixed on a neatly fabricated steel frame and mounted on to walls or as required for lighting distribution. The job includes painting of steel frames, labelling / writing the connection chart inside the door with WHITE duco paint as required, double earthing, testing & commissioning.	Nos	2	17,514.00	35,028.00
	j) Supply and laying of PVC conduit pipe of 1.5mm thick, 1" dia with necessary clamps, couplers, bends, junction boxes at every 3.6mts. The conduit shall be laid concealed/surface for drawing telephone cables and also be laid in building slab for lighting circuits as per site engineer's instruction	Mts	200	33.00	6,600.00
	k) Supply and Installation of MCB DB with MCB 415V, 4 way consisting of 10 to 20A -- 4nos MCBs on each phase, sheet enclosed, dust & vermin proof. Type KSTIL of STANDARD/ KOPP MAKE along with controlling 63A ICTPN in sheet enclosure with HRC fuses, PVC marking ferrules etc. It is to be fixed on a neatly fabricated steel frame and mounted on to walls or as required for lighting distribution. The job includes painting of steel frames, labelling / writing the connection chart inside the door with WHITE duco paint as required, double earthing, testing & commissioning.	Nos	2	10,622.00	21,244.00
	l) Shifting, Assembly & installation of BHEL free issued Periphery light luminaire with POT OPTICS reflector and toughened glass cover for use with SON - T 150 W. lamps complete with all accessories by providing BHEL free issued GI Pipe neatly bent (120degrees) and fixed at a height of 15 Mtrs. or as per site Engineers instructions / as required by site conditions. Testing and commissioning.	Nos	5	620.00	3,100.00
14	Shifting and laying of LT power PVC armoured aluminium cable including Dressing				
	a) 1C x 630sq.mm	Mts	100	20.00	2,000.00

S. No.	Description of the item	Unit	Qty	Rate (₹)	Amount (₹)
	b) 31/2C X 300sq.mm	Mts	200	26.00	5,200.00
	c) 31/2C X 240sq.mm	Mts	400	26.00	10,400.00
	d) 31/2C X 185sq.mm	Mts	200	22.00	4,400.00
	e) 31/2C X 150sq.mm	Mts	200	22.00	4,400.00
	f) 31/2C X 120sq.mm	Mts	200	18.00	3,600.00
	g) 31/2C X 95sq.mm	Mts	200	18.00	3,600.00
	h) 31/2C X 70sq.mm	Mts	200	15.00	3,000.00
	i) 31/2C X 50sq.mm	Mts	200	15.00	3,000.00
	j) 31/2C X 35sq.mm	Mts	300	13.00	3,900.00
	k) 31/2C X 25sq.mm	Mts	300	13.00	3,900.00
	l) 4C X 16 /10/6/4sq.mm	Mts	1000	12.00	12,000.00
15	Shifting and laying of Control cable including Dressing				
	a) 19C X 2.5sq.mm and above	Mts	100	18.00	1,800.00
	b) 10C to 18C X 2.5sq.mm	Mts	100	15.00	1,500.00
	c) 5C to 9C X 2.5 sq.mm	Mts	200	14.00	2,800.00
	d) upto 4C X 2.5sq.mm	Mts	1000	11.00	11,000.00
16	Shifting and laying of LT copper power cable including Dressing				
	a)1C X 70sq.mm	Mts	200	12.00	2,400.00
	b)4C X 70sq.mm	Mts	100	20.00	2,000.00
	c)4C X 50sq.mm	Mts	100	17.00	1,700.00
	d)4C X 35/16sq.mm	Mts	150	15.00	2,250.00
17	Power cable termination including supply of cable glands & lugs(Copper/Aluminium).				
	a) 1C x 630sq.mm	Nos	6	615.00	3,690.00
	b) 31/2C X 300sq.mm	Nos	4	1,678.00	6,712.00
	c) 31/2C X 240sq.mm	Nos	10	1,600.00	16,000.00
	d) 31/2C X 185sq.mm	Nos	4	960.00	3,840.00
	e) 31/2C X 150sq.mm	Nos	4	854.00	3,416.00
	f) 31/2C X 120sq.mm	Nos	4	797.00	3,188.00
	g) 31/2C X 95sq.mm	Nos	4	635.00	2,540.00
	h) 31/2C X 70sq.mm	Nos	4	435.00	1,740.00
	i) 31/2C X 50sq.mm	Nos	4	392.00	1,568.00
	j) 31/2C X 35sq.mm	Nos	6	286.00	1,716.00
	k) 31/2C X 25sq.mm	Nos	6	286.00	1,716.00
	l) 4C X 16 /10/6/4sq.mm	Nos	76	237.00	18,012.00

S. No.	Description of the item	Unit	Qty	Rate (₹)	Amount (₹)
18	Control cable termination including supply of cable glands & lugs(copper).				
	a) 19C X 2.5sq.mm and above	Nos	4	450.00	1,800.00
	b) 10C to 18C X 2.5sq.mm	Nos	6	361.00	2,166.00
	c) 5C to 9C X 2.5 sq.mm	Nos	8	232.00	1,856.00
	d) upto 4C X 2.5sq.mm	Nos	50	150.00	7,500.00
19	LT Copper Power cable termination including supply of cable glands & lugs(copper).				
	a)1C X 70sq.mm	Nos	20	193.00	3,860.00
	b)4C X 70sq.mm	Nos	4	584.00	2,336.00
	c)4C X 50sq.mm	Nos	4	420.00	1,680.00
	d)4C X 35/16sq.mm	Nos	6	295.00	1,770.00
	Total value of work			₹	7,99,193.00
Total : ₹ Seven lakhs ninety nine thousand one hundred ninety three only.					

Note:

1	The above rates are exclusive of VAT and SERVICE TAX .
2a	The contractor shall indicate VAT & Service Tax separately as extra in price bid.
b	The Contractor has to submit separate VAT and Service tax invoice along with RAB (Running Account Bill)
c	The quantities indicated in the schedule are tentative and may increase or decrease or delete. Any other works not mentioned but required for completion of the project are to be carried out by the contractor with mutually agreed rates and vetted by finance.
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4	The contractor shall mark with paint on all panels regarding power cables size & FROM/TO destinations.
5	Contractor shall shift the materials from different locations inside the factory to the project site and return back the left over materials after completion of the work to the project stores or as per the instructions of the site engineer.
6	The contractor should follow all the statutory requirements, Environmental Management System (EMS), Occupation Health and Safety Management System (OHSAS) while executing the work
7	The works are to be carried out in accordance with IE rules 1956.

Note : The bidders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value in figures and words.

Tender %	In figure	In words
Excess		
Less		
Estimated value		