

PRICE BID

BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM, HYDERABAD-32
FACTORY CIVIL ENGINEERING DEPARTMENT

SCHEDULE - A

TENDER NOTICE No: HY/FCD/OT-11/2008-09 Dt: 03.10.08

Item no: 2

Name of work:-Civil works for providing Bio-metric systems in Factory entrance gates .**Part A -CIVIL WORKS**

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
1	Dismantling reinforced cement concrete / plain cement concrete and disposing of debries upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete	250	one Cu.m	417.60	104400.00
2	Removing the existing unserviceable collapsible shutter and handing over to stores, supplying and fixing in position new collapsible steel shutter with vertical channels 20mm x 10mm x 2mm braced with flat iron diagonals 20mm x 5mm size with top and bottom rails or M.S. 'T' 40mm x 40mm x 6mm with 38mm dia steel pulleys complete with bolts and nuts. Locking arrangements, stoppers, handles, including applying one coat of red oxide primer before erection and two coats of synthetic enamel paint of approved colour and brand after erection etc., complete including cost of all materials.(only synthetic enamel paint will be issued on free of cost by BHEL at their stores)	200	One sq.m.	1632.00	326400.00
3	Dismantling the existing structural steel work/hand railing carefully by loosening nuts, gas cutting as per the site conditions for reuse and stacking at site/ handing over to stores as directed by Engineer-in-charge	25	One MT	726.00	18150.00
4	Plain cement concrete 1:2:4 using 20 mm and down graded granite stone metal for levelling course including ramming, consolidation, curing etc., complete. (60% of 20 mm metal and 40% of 10 mm metal).	245	One Cu.m	2759.00	675955.00
5	Vibrated machine mixed reinforced cement concrete 1:2:4 using 20 mm and down graded granite stone metal including the cost of labour, all materials, curing etc., but excluding the cost and fabrication charges of MS reinforcement for all items of works.	45	One cu.m.	3360.00	151200.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
6	Supplying & fixing of Durocrete/Nitco make tiles of 20 mm thick over a base of cement mortar 1:6, 40 to 50 mm thick including jointing of tiles, cost of materials, transportation and labour etc., completed as directed by Engineer – in charge.	1610	One sq.m	750.00	1207500.00
7	Supply & fixing of 20 mm thick best quality approved colour and design machine cut mirror polished granite slabs in required sizes for counter wash basins, floorings, vanity counter, claddings, facias etc. including cutting, champering, rounding and mirror polishing etc. complete as directed. Cost of granite slabs shall be Rs. 1600/- per Sq. m and granite slabs of required design and colour will be selected by department.	100	One Sq.m	2559.10	255910.00
8	Supplying and fixing of 50mm (2") dia stainless steel tubular railings (pipe of A304 grade 1.2 mm thick) as per design and drawing of BHEL. The cost will include bending, welding/brazing, buffing , polishing, fixing to the plumb, wastage, etc., complete.The above pipe will be used for hand railing , veritcal pipe, horizontal pipe as per requirement.(The vertical pipe will be embeded in concrete for a depth of 45 cm from finshed floor level along with necessary hold fasts.The veticals will be at intervals of 1.2 to 1.5 M.).The payment will be made for finished quantity measured above finished floor level.)	1000	One RM	1435.00	1435000.00
9	Fabrication & erection of structural steel work including all materials going into the process of fabrication and forming an integral part of steel work together with all shop and site welding as necessary and all site connections. The rate shall include painting with one coat of red oxide as per I.S. specification and all site charges for handling, leading and loading and unloading of materials at fabrication yard. (The raw structural steel sections acetylene, oxygen will be issued free of cost).	45	One MT	5966.40	268488.00
10	Providing MS reinforcement including transporting from stores, cutting, bending, binding of rods, tying grills, placing in position including the cost of MS reinforcement and binding wire etc. complete.	3	One M T	30000.00	90000.00
11	Providing 12 mm thick plywood/MS plate form work with necessary support with casurina ballies etc. complete	200	One sq.m	85.20	17040.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
12 (a)	Earth work excavation in all soils except rock requiring blasting for an initial lead of 10M including strutting, shoring if any and dressing the bottom of excavation to receive concrete etc., complete.- within an initial depth of 1.00M	193	one cu.m	26.46	5106.78
12 (b)	.. Do.. Additional depth of 1.00M or part there of over initial depth of 1.00 M	7	one cu.m	30.00	210.00
13	Supplying & fixing of Tracdek Hi-rib single skin colour galvalume / Zinalume sheets of 0.5 mm tk. 1 mtr width and length upto 12 mts with factory cut and fixing to the roof shall be crest fixed to roof purlins with number 12-14 x 55 mm long polymer coated galvanised hex head self drilling screws with integral washers and EPDM seals (4 fastners for support) for sheet etc., complete as directed (including cost of galvalume sheets).For roofing, side cladding and louvers with necessary fixtures.	250	One sq.m	720.00	180000.00
14	Supply and fixing aluminium composite panel (ACP) 3 mm thick in required colours for exteriors, consisting of two layers of aluminium skins of 0.25 mm thick sandwiching a thermo plastic core in continuous lamination process with PVDF resin coating for exterior grades ensuring long colour and no fungal attacks. Base frame work with aluminium sections shall be fixed over the brick work and the above aluminium composite panels shall be fixed to the frame work as cladding. It includes cost of labour, materials, accessories, adhesives, scaffoldings, wastages, transport, taxes and fixing into a neat finish in aesthetic point of view, with our any undulations- (The rate quoted is for finished item in all respects-Only area of work will be measured for payment). Make: ALEX PANELS	1195	One sq.m.	3600.00	4302000.00
15	Fixing of PVC pipes of 150 mm dia of 4 kg/sq.m including specials, clamps and bends etc. Joints shall be fixed with sealants, cost of all materials and labour.(only PVC pipe will be issued by BHEL on free of cost at their stores)	100	One R M	192.00	19200.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
16	Applying exterior emulsion paint 2 coats to external new /old plastered surfaces including etc., over a coat of primer, cost of primer paint and labour etc., complete (only emulsion paint will be issued free of cost by BHEL at their stores).	5000	One Sq.m	19.80	99000.00
17	Painting with two coats of synthetic enamel paint of approved shade over primer including scraping the old wood / steel surfaces cost of all labour and other incidental etc., complete. (Only paint and thinner will issued on free of cost at BHEL stores).	500	one sq m	19.80	9900.00
18	Plastering to brick work with C.M 1:6, 20 mm thick, smoothly finished surface with polish trowel as required , including the cost of all materials, labour, scaffolding, curing etc., complete	250	One Sq.m	89.40	22350.00
19	Providing brick work in C.M (1:6) using best quality ground moulded well burnt bricks with minimum crushing strength of 35 Kg/ Sq.cm including scaffolding ,at all heights , curing, labnour , cost of labour, etc., complete.	15	One Cu.m	1122.00	16830.00
20	Dismantling brick masonry walls for all heights, removing and clearing the debries and carting away upto to lead of 2 KM including loading, unloading and spreading segregating useful materials as directed by Engineer-in-charge including the cost of all labour scaffolding etc., complete.	10	One Cu.m	367.41	3674.10
	Part -A				9208313.88

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
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PART-B- ELECTRICAL WORKS

S.No.	Description	Qty	Unit	Rate in Rs	Amount in Rs.
1	<p>ELECTRICAL WORKS</p> <p>Cable Raceways</p> <p>Supply & Installation of in-screed floor raceways to be run separately for power cables consisting following rectangular Aluminium sections including chasing and refilling the trench as per the route shown in the drawing and approved by Engineer in charge at site including clamping & closing the open pipe ends temporarily by suitable end covers against entry of dust or any other foreign material complete in all respects.</p> <p>56 x 38 mm</p>	400 R M	One R M	325.00	130000.00
2	<p>Removal of existing electrical equipment</p> <p>Removing all existing switch socket, cable, wire, DB, Telephone socket, Networking socket, Telephone and data cable or any other equipments including stacking and transporting to the departmental stores.</p>	1	LS	15000.00	15000.00
3	<p>Supply, Installation and commissioning of 8 way, TPN, MCB type Power Distribution Board (PDB) flush mounted on wall, sheet metal fabricated, powder coated, having dust-proof and vermin' proof, and hinged door with all internals such as DIN rails, neutral-link, inter connected wiring complete with earthing lugs housing following switchgears, complete in all respects.:</p> <p>63A, FP MCB Isolator as incomer(10KA) - 1 No.</p> <p>20A, SP, MCB outgoing(10KA) - 24 Nos.</p> <p>Make : Siemens/Legrand/Hager</p>	6 Set	One Set	9000.00	54000.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
4	<p>CABLES / MAINS</p> <p>Supply & Installation of 1100V grade FRLS flexible armoured cable having sector / circular shaped aluminum / copper conductor PVC insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armoured and overall extruded PVC sheathed confirming to IS:1554 laid on wall/ceiling using GI clamps & spacers as per route shown at site and further as directed by Consultant at site in the following sizes, complete in all respects.:</p> <p>Supply & laying of 4C x 16 SQ.MM Copper flexible cable in suitable size of PVC Conduit.</p>	250 R M	One R M	900.00	225000.00
5	<p>Supply and installation of end terminations for above mentioned cables, including compressed type brass glands, crimping type copper lugs, insulation tape etc. as required complete with earthing of glands in following sizes, complete in all respects.</p> <p>4C x 16 SQ.MM Copper flexible cable.</p>	12 Nos.	Each	650.00	7800.00
6	<p>WIRING</p> <p>Supply & Installation of surface/concealed point wiring FRLS using 600v grade 1.5 SQ.MM copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through 1.2mm thick PVC conduits laid concealed over false ceiling or in wall chases including 1.0 SQ.MM green color copper earth wire and provision of grid plate type switches as approved by architect, complete in all respects.</p> <p>Primary light points of 5A switch (Switch of ROMA type)</p>	90 Nos.	Each	945.00	85050.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
7	Supply & installation of above for Secondary light points looped from the above point.	24 Nos.	Each	335	8040.00
8	Supply and laying of 1100V grade PVC insulated, copper conductor cables in 1.5mm thick P.V.C. conduits, run above the false ceiling, concealed in the wall or partition, saddles at every 600mm c/c. A separate neutral shall be run for each circuit. The rate shall include all fixing accessories like collars, tees, elbows, providing fan hooks, ceiling roses, holders, wooden blocks, switches, sockets, switch mounting MS boxes, MS Junction Boxes etc., of approved make, complete in all respects including supply and laying of 2 runs of 2.5 SQ.MM. PVC insulated copper conductor FRLS cable along with 1run of 1.5Sq.mm PVC insulated copper conductor cable.	1350 R M	One R M	125	168750.00
9	Same as item no.(8) for supply and laying of 2 runs of 4.0 SQ.MM. PVC insulated copper conductor FRLS cable along with 1 run of 1.5Sq.mm PVC insulated copper conductor cable. Run in a 25mm dia.,1.2mm thick PVC conduit, on surface of the ceiling or in wall, complete in all respects.	600 R M	One R M	250	150000.00
10	Supply and fixing of 25 Amps, 240V Box type mounting Double pole MCB and Heavy duty Plug & Socket with overload & short circuit protection of North-West make catalogue No. ACPU 6M-BTJ fixed on a suitable Modular type concealed box with suitable top cover for ACs. Make: North-West	20 Nos.	Each	1500	30000.00
11	Supply and installation of one no 6A/16A 5pin shuttered type sockets controlled by 1no. 16A switch with suitable size of front plate etc. Make: ROMA OF ANCHOR	80 Nos.	Each	800	64000.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
12	EARTHING Supply and installation of 2 nos. of separate earth pits each with material for power and network (including excavation) comprising of 600mm x 600mm x 3mm thick copper plate buried at a minimum depth of 2.5 meter including necessary materials like charcoal, salt etc as required conforming to BIS standards having brick masonry chamber with hinged cover and watering arrangement, complete in all respects.	5 Nos.	Each	21000	105000.00
13	Supply and installation of copper wire/strips in following sizes 14 SWG copper bare wire	500 R M	One R M	50	25000.00
14	Supply and installation of isolated earthing system for computer etc. using insulated green yellow copper earthing wire laid through 20mm PVC conduits from separately made earth pit to the equipment in following sizes Supply and installation of 16 sqmm, cu., in 20mm PVC flexible conduit.	250 R M	One R M	150	37500.00
15	Supply and installation of 6 sqmm, cu in 20mm PVC flexible conduit.	250 R M	One R M	75	18750.00
16	LIGHTING FIXTURES Supply & Installation of lighting fixtures with lamps as per the details below including necessary hardware such as clamps, nuts, bolts, nails, screws and suspension down rods as required for fixing the fixtures in position as directed by architect / consultant, complete in all respects. Supply & fixing of T5 energy efficient light fitting of Philips make T 122/228 HF with GMS 122 reflector for 2XTL5 28W.	75 Nos.	Each	2500	187500.00

S.No.	Description of item	Qty	Unit	Rate in	Amount in Rs.
17	Supply & Installation of lighting fixtures with lamps as per the details below including necessary hardware such as clamps, nuts, bolts, nails, screws as required for fixing the fixtures in position as directed by architect/consultant, complete in all respects. Supply & fixing of energy efficient non integral flood light fitting of Philips make RVP 301/2XHPI-T 250W complete with external control gear box .	12 Nos.	Each	14000	168000.00
18	Supply & installation of ceiling fan 1400mm sweep (56") double ball bearing type, ISI mark, white colour with all standard accessories including fan hook, downrod, clamps and connecting it up to the fan point with suitable length of 16/0.2.mm PVC insulated twin twisted copper conductor cable. Make : Bajaj/Orient.	25 Nos.	Each	2000	50000.00
19	Supply & installation of LED display digital clocks of size 600 X 300 mm including all accessories as per instruction of consultant/architect.	10 Nos.	Each	4500	45000.00
20	Proper dressing of all the existing power cable and terminated properly by using suitable lugs, ferrules etc.	1	LS	6000	6000.00
			Total:	Part-B	1580390.00
	Grand Total:(Part A+Part B)				10788703.88

Total In words: One Crore seven lakhs eighty eight thousand seven hundred and four only.

I / We have quoted above [] / below [] (tick the relevant) for the rates given above.
% in words:

Name of the Contractor :

Signature of the Contractor

Accounts Representative

Opening officer