



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-04/2012-13, Dt: 31.05.2012

PRICE BID

Item no.: 4

Name of work: Modernisation and renovation of first floor over 51 Bowl Mill canteen.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
	Part-I (Civil works)				
1	Removing existing Roof/ Side cladding of AC Sheets roofing, louvers side cladding including loading, carting, unloading etc., with in the premises up to a lead of 2 km as directed by Engineer-in-charge.	30.00	Sqm	43.65	1,309.50
2	Dismantling steel work in built up sections in angles tees, flats and channels including all gusset plates, bolts, cutting rivets, welding etc., including dismembering and stacking within 50 meters lead etc. complete as directed by Engineer-in-charge.	0.30	MT	890.11	267.03
3	Dismantling brick masonry walls for all heights, removing and clearing the debris 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 as directed by Engineer-in-charge.	53.00	Cu.m	355.88	18,861.64
4	Dismantling reinforced cement concrete / plain cement concrete and disposing of debris upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	4.00	Cu.m	582.68	2,330.72
5	Earth work in excavation in all soils by mechanical means (Hydraulic Excavators) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50M etc. complete as directed by Engineer-in-charge.	6.00	Cu.m	103.40	620.40
6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	2.00	Cu.M	1,560.50	3,121.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
7	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	5.00	Cu.M	1,641.30	8,206.50
8	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works up to floor five level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	175.00	Cu.M	2,002.00	3,50,350.00
9	Centering and shuttering including strutting, propping etc.; and removal of form work, for columns, pillars, piers, abutments, machine foundations, posts and struts etc. complete as directed by Engineer-in-charge.	1,310.00	Sq.m	180.40	2,36,324.00
10	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding grills with binding wire all complete by cold twisted bars etc. complete as directed by Engineer-in-charge.	14.00	M.T	4,003.00	56,042.00
11	Conveyance of excavated spoil up to a lead of 2 Kms, including loading, unloading and spreading etc. complete as directed by Engineer- in- charge.	3.00	Cu.M	56.41	169.23
12	Filling with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidation each deposited layer by ramming and watering, lead upto 50.00 m and lift upto 1.50 m etc. complete as directed by Engineer-in-charge.	3.00	Cu.M	45.70	137.10
13	Brick work with clay fly ash FPS brick of class designation 75 in super structure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 Coarse sand) etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	175.00	Cu.M	1,808.00	3,16,400.00
14a	Plastering in CM 1:6, 20 mm thick to internal and external surfaces of walls including the cost of all materials, labour, curing etc. complete as directed by Engineer-in-charge-Upto 10.00 M level etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	2,010.00	Sq.m	65.80	1,32,258.00
b	Cement Plaster to ceiling /walls with 12mm thick cement plaster finished with a floating coat of neat cement of mix 1:3 (1 cement : 3 fine sand) etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	925.00	Sq.m	59.00	54,575.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
15a	Supply and fixing of top fixed, side hung of NCL Seccolor Ajantha windows & Ventilators fabricated from Roll formed section made of pre painted steel (Base steel as per IS 513 of 0.6 mm thick, 'D' quality, galvanized as per IS 277 with zinc 120 GSM / Sq. Mtr). Section for shutter should be of 46 x 46 mm, external frame should be of 46 x 52 mm, section for glass beading should be of 18 x 25 mm & center mullion should be 46 x 70 mm. The sections to be cut to length, meter joined with corner bracket. Centre mullions are to be fixed using mullion cap. Handle made of high grade aluminium powder coated & with nylon receiver & glazed with 5 mm thick, Modi/Saint Gobain float glass. Gasket made of E.P.D.M. Corner brackets made of C.R.C.A with zinc phosphating. Million caps made of glass filled nylon. The above frames should be fixed to the concrete / masonry walls by means of self expanding screws. Approximate size of windows 1.30mx0.9m and 3.00mx2.10m -Double shutter without guard bars(grills)... Excise duty the basis of measurement for finished work only etc. complete as directed by Engineer-in-charge	55.00	Sq.m	4,046.00	2,22,530.00
b	Supply and fixing of aluminum window grills of size 1.50 Mx1.80M approx. and 1.20 mx1.80M approx. . along with aluminium frame consisting aluminium 'F' (solid) 0.80kg/12' supply and fixing of design of 2" aperture aluminium grill to the above frame work with necessary fixtures. It includes fixing of total frame to the existing brick work, finishing etc. complete. (The material shall be aluminium alloy :6063, thick 7 mm, ultimate tensile strength more than 19 kgs/sq.mm) etc. complete as directed by Engineer-in-charge.	55.00	One Sq.m	1,540.00	84,700.00
16	Providing 50mm thick purdi walls and side drops in CM 1:4 at all floors including cost of form work, supplying and trying of chicken mesh net to reinforcement , cost of binding wire and providing border bands and openings if any, curing etc.; complete but excluding cost and fabrication of MS reinforcement which will be paid for separately etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	24.00	Sq.m	98.40	2,361.60
17	Supply & fixing of 18 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, facials 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 etc. complete as directed by Engineer-in-charge.	90.00	sq.m	3,070.92	2,76,382.80

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
18	Plastering over roof slab in CM 1:4, 20mm thick mixed with water proofing compound, Make: "Sika" @ 3% by weight of cement as per manufacturer's specification, curing as directed. Rate quoted shall include finishing, cost of all materials and labour etc., complete. (Cement =7.69 kgs/sq.m x3% WP@ Rs 20.00 per kg = Rs 4.61) upto 10 m height etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	585.00	Sq.m	81.30	47,560.50
19	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by engineer-in-charge in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg per Sq.m including pointing in white cement mixed with pigment of matching shade etc. complete as directed by Engineer-in-charge.	440.00	Sq.m	556.80	2,44,992.00
20	Supplying and laying of vitrified tiles of brighter shades and marble design of Premium Quality (1st quality) in required texture, design and colour, for flooring /skirting /cladding using vitrified tiles of size 600 x 600mmx8 mm thick of approved make. It includes cost of cutting, champering of tiles to required size, with base of Conmax C - 500 tile adhesive for fixing tiles on existing mosaic/cement flooring, jointing the tiles with colour tint etc. complete as directed by Engineer-in-charge. The rate quoted shall include cost of all materials, labour, adhesives, colour tint material, leads and lifts etc. complete. Amount will be paid on the basis of measurement of the area of finished work only. It also includes surface preparation of existing ceramic floor giving necessary slopes, cleaning joints and grouting joints with pigmented additives to match shade of the tile, making pockets for electrical, communication, network cables etc. complete as directed by Engineer-in-charge. Amount will be paid on the basis of measurement for finished work only etc. complete as directed by Engineer-in-charge.	470.00	Sq.m	950.00	4,46,500.00
21	Providing and fixing stainless steel tubular railings (1.2 mm thick) 0.90 M height as per design and drawings using top rail (2"), vertical pipe (1.5"), Horizontal pipe (0.63") along with 12 mm thick glass with glossy finish etc., as directed by Engineer- in charge.	15.00	RM	3,300.00	49,500.00
22	Applying two coats of oil bound distemper of given shade over a coat of primer including through cleaning of the surfaces, cost of all labour and other incidentals. (Only OBD, OBD Primer Paint will be issued by BHEL on FREE of cost at their stores) etc. complete as directed by Engineer-in-charge.	1,935.00	Sq.m	29.00	56,115.00
23	Applying exterior emulsion paint 2 coats over one coat of primer to external new plastered surfaces including cost of all labour and other incidentals. only exterior paint will be issued by BHEL on free of cost) etc. complete as directed by Engineer-in-charge.	1,000.00	Sq.M	20.55	20,550.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
24	Supply & fixing "zoloto" make bronze push cocks. With all accessories / Cat: Art 1029 (400gms) of 15mm dia etc. complete as directed by Engineer-in-charge.	54.00	Each	415.00	22,410.00
25	Providing and Fixing PTMT waste coupling for wash basin and sink, of approved quality and colour - waste Coupling 31 mm of 79 mm length and 62 mm breadth weighing not less than 45 gms etc. complete as directed by Engineer-in-charge.	24.00	Each	75.80	1,819.20
26	Supply and Fixing 31.75 mm dia PVC flexible waste pipe of 914.40 mm length of 1st quality etc. complete as directed by Engineer-in-charge.	24.00	Each	21.00	504.00
27	Supply & fixing of 6 mm thick mirror of approved quality "Modi float/Saintgobin glass", with 6 mm thick hard board back and with best quality teak wood frame (design beading) all round the mirror including necessary clamps, polishing to the beading, cost of all materials etc. complete as directed by Engineer-in-charge.	15.00	Sq.m	1,445.00	21,675.00
28	Supplying and fixing CI Nahany traps 1st quality ISI marked conforming to IS: 1729 - 1979 with C.P Grating fixing with white cement as per site requirements with standard practice - 100mm inlet - 75 mm dia (3") outlet pipe - 4 Kgs etc. complete as directed by Engineer-in-charge.	18.00	Each	200.00	3,600.00
29	Supply and fixing in position medium teak wood door frame along with single leaf shutters solid core non - decorative type 30 mm thick of approved quality and brand including 3 No.s MS hinges 10 cm long and 1 no. mortise lock (Godrej make) , using scantling of size 100 mm X 75 mm (including with MS holdfasts of size 230 X 50 X 4 mm - 6 No.s and painting with coal tar to the faces coming in contact with masonry / concrete . including cost of all materials , labour etc. complete as directed by Engineer - in - charge.	16.00	Sq.M	3,180.00	50,880.00
30	Supply & fixing in position PVC Pipes of 3" dia(as per IS 6kg/sq.m) of best quality for drainage lines / urinal / hand wash areas including chasing the brick wall, concrete etc. and making good the same after fixing the same etc. complete as directed by Engineer-in-charge.	60.00	RM	108.70	6,522.00
31	Supplying and fixing plain PVC pipe of 110 mm dia of approved quality with specials, accessories and approved sealing / jointing compound on the exterior of the inserted portion of the fitting and fixing in position and jointing to MS gutters, including cost of all materials, sealing compound, labour etc., for all heights etc. complete as directed by Engineer-in-charge.	85.00	R M	153.00	13,005.00
32a	Supply & fixing 15 mm dia Nominal Bore GI pipe medium Grade properties and weight as per IS 1239 ISI mark with GI fittings including the cost of GI pipe & its fittings, chasing brick work/concrete and making good the same, cost of labour, all materials etc. complete as directed by Engineer-in-charge.	22.00	RM	131.00	2,882.00
b	.. Do... 20mm dia (¾")	30.00	RM	146.00	4,380.00
c	.. Do... 25mm dia (1")	160.00	RM	191.00	30,560.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
33a	Supply & fixing of Gunmetal Gate (GM peet) valve as per IS -778 class-I, Indian make heavy type 15 mm (½") dia NB size etc. complete as directed by Engineer-in-charge.	3.00	Each	302.00	906.00
b	.. Do .. 20mm dia (¾")	6.00	Each	396.00	2,376.00
c	.. .do ...25mm dia (1")	18.00	Each	566.00	10,188.00
34	Construction of brick masonry chamber of size 23 x 30 Cm (9" x 12") in brick work in CM 1:6 and plastering in CM 1:4, 20 mm for gully trap 150mm x 100mm including cost of excavation, PCC 1:4:8, 75 mm thick, all materials, labour etc. complete as directed by Engineer-in-charge.	3.00	Each	321.00	963.00
35	Supplying, laying, jointing and testing 101.60 mm (4") SWG pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in Cement mortar 1:5:1 prop. including excavation of trenches and socket pits in any soil (except rock requiring blasting) up to 1524 mm (5'.0") depth and refilling with watering and tamping etc. complete as directed by Engineer-in-charge.	6.00	RM	348.00	2,088.00
36	Supply and Fixing PVC Ventilating cowl of 110mm dia etc. complete as directed by Engineer-in-charge.	3.00	Each	14.00	42.00
37	Providing and placing on terrace (at all floor levels) of polyethylene water storage tank of 1000 ltrs capacity with double layer of make sintex/Aqua tech as per ISI 12701/96 with cover and suitable locking arrangement and making necessary holes for inlet and outlet and overflow pipes with fittings (ballcock, inlet and outlet nipples) without base support for tank. (Brick work will be paid separately) etc. complete as directed by Engineer-in-charge.	3.00	Each	6,000.00	18,000.00
Total of Part-I				₹	28,24,964.22
Add increase in VAT 1% over the material cost (70% of above value)				₹	19,774.75
Sub Total of Part -I				₹	28,44,738.97
Part-II (Electrical works)					
1	Supply, installation and Testing of 56" Sweep Ceiling fan along with Electronic regulator complete in all respect including wiring (phase neutral & Earth) from ceiling rose to fan. Note : supply and fixing of Extension rod for bringing down the level of fan is in Contractors scope. Make Bajaj / Usha / Crompton Greaves / Orient /Khaitan etc. complete as directed by Engineer-in-charge.	36.00	Nos.	1600.00	57,600.00
2	Supply, Installation and fixing of 2 x 36 Watts T5 Tube light fittings with accessories like reflector, chokes and tubes. This includes supply & fixing of down rods, round blocks, connecting the copper twin twisted wire along with earth wire from ceiling rose to fitting and other accessories. Supply of wire is also in contractors scope etc. complete as directed by Engineer-in-charge. Make : Bajaj / Crompton / Philips / Wipro	47.00	Set	1400.00	65,800.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
3	Supply and installation of 450 mm sweep exhaust fans, which includes assembling and testing of all fans. The job also involves making suitable holes in the wall inclusive of masonry works, laying of wire (E , N& P) from ceiling rose to fan, fixing of fans rigidly with suitable arrangement to wall. Bajaj / Usha / CG / Orient / Khaitan etc. complete as directed by Engineer-in-charge.	16.00	Set	4000.00	64,000.00
4	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, 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, labeling / writing the connection chart inside the door with WHITE duco paint as required, double earthing, testing & commissioning etc. complete as directed by Engineer-in-charge.	2.00	Nos.	15500.00	31,000.00
5	CABLES Installation of 1100V grade armored Aluminium cable, PVC insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / Wire armored and overall extruded PVC sheathed conforming 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 respect including dressing & identification etc. complete as directed by Engineer-in-charge.				
a	Laying of 3 ½ core X 95/70/ 50 Sq. mm Armored Aluminium cable etc. complete as directed by Engineer-in-charge.	200.00	R.M.	16.00	3,200.00
6	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 respect. (Note : Each consists of both sides termination) etc. complete as directed by Engineer-in-charge.				
a	3 ½ core X 95 / 70 / 50 Sq. mm Armored Aluminium cable etc. complete as directed by Engineer-in-charge.	1.00	Each	500.00	500.00
7	WIRING 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 / Radiant / fin cab/ 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 etc. complete as directed by Engineer-in-charge.	106.00	Points	1120.00	1,18,720.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
8	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 etc. complete as directed by Engineer-in-charge.	106.00	Nos.	275.00	29,150.00
9	Supply, laying and connecting 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. Run in a 19mm dia. 1.2mm thick PVC conduit on surface of the ceiling or in wall. (note : each R.M. consists of 2 meters of 2.5 Sq.mm, 1 Meter of 1.5 Sq.mm cable and 1 Meter of 19mm dia PVC conduit) etc. complete as directed by Engineer-in-charge.	300.00	R.M.	100.00	30,000.00
10	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. taken from DB for Water cooler /Flash O Light / split AC units etc. complete as directed by Engineer-in-charge.	10.00	EACH	450.00	4,500.00
11	Supply and laying of Raceways with PVC sleeves in the partition etc. complete as directed by Engineer-in-charge.	100.00	R.M.	350.00	35,000.00
12	Laying of 1.5 Sq. MM wire for sound box in the food serving rooms including wiring through conduits (The scope includes supply of conduits and other dressing items, Also approximately on an average 25 Meters of the existing wire have to be laid for each points) etc. complete as directed by Engineer-in-charge.	10.00	Each	1000.00	10,000.00
13	EARTHING 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 etc. complete as directed by Engineer-in-charge.	2.00	Each	7350.00	14,700.00
14	Supply and installation of copper wire/strips of the size 14 SWG copper bare wire from earth pits to Main Distribution boards/ ICTP switches etc. complete as directed by Engineer-in-charge.	100.00	Each	80.00	8,000.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
15	Shifting and Erection of 63 Amps ICTPN sheet enclosure switches with HRC fuse links for machines etc. complete as directed by Engineer-in-charge.	2.00	Each	560.00	1,120.00
Total of Part-II				₹	4,70,090.00
Total value of work (Part I + Part II)				₹	33,14,828.97
Total : ₹ Thirty three lakhs fourteen thousand eight hundred twenty eight and ninety seven paise only					

Note: In Electrical works Sl. no. 5[a] item supply is in BHEL scope. All the electrical work rates are inclusive of VAT.

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	Service tax is extra as applicable, which will be reimbursable to the agency on production of paid proof documents.
3	The rates are inclusive of all taxes and duties.

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		

Name of the Contractor :

Signature of the Contractor