



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-18/2014-15, Dt: 31.07.14

PRICE BID

Item no.: 1

Name of work: Civil works-Providing wash room and shed for storing snacks at 02 block canteen.

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
	Part A - Civil Works				
1	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable materials and disposal of unserviceable materials - upto 1.20 M.	2.00	Each	359.80	719.60
2	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.	3.00	Cu.m	355.88	1,067.64
3	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.	72.00	Sqm	43.65	3,142.80
4	Dismantling M.S. partitions (Weldmesh, glazed or panelled) of standard size 1.20 M x 2.40 M or 1.20 x 3.30 M including M.S. Posts and transporting and stacking the materials for reuse etc., complete as directed by the Engineer-in-charge (The rate shall include for removing glass panes before dismantling glazed partitions and stacking glass panes).	3.00	MT	651.07	1,953.21
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.	35.00	Cu.m	103.40	3,619.00

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
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) - The cement will be issued free of cost by BHEL at BHEL stores.	30.00	Cu.M	1,560.50	46,815.00
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) - The cement and steel will be issued free of cost by BHEL at BHEL stores.	10.00	Cu.M	1,641.30	16,413.00
8	Centering and shuttering including strutting, propping etc; and removal of form work, for walls (any thickness) including attached pilasters,butteresses, plinth and string courses etc. upto plinth level.	12.00	Sq.M	180.40	2,164.80
9	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. - The steel will be issued free of cost by BHEL at BHEL Stores.	0.80	M.T	4,003.00	3,202.40
10	Coursed rubble masonry in second sort with hard stone in foundation & plinth with cement mortar 1:6 (1 cement :6 coarse sand) - The cement will be issued free of cost by BHEL at BHEL Stores.	20.00	Cu.M	1,521.00	30,420.00
11	Brick work with Ground moulded clay FPS brick in super structure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 Coarse sand). - The cement will be issued free of cost by BHEL at BHEL Stores.	17.00	Cu.M	2,104.00	35,768.00
12	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 -Upto 10.00 M level. - The cement will be issued free of cost by BHEL at BHEL Stores.	130.00	Sq.m	65.80	8,554.00
13	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).	130.00	Sq.m	19.31	2,510.30

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
14	Fabrication and erection of panelled steel gate shutter hinged, Including gas cutting, welding of sheets or angles wherever required etc., complete as directed by Engineer-in-charge. (Structural steel sections will be issued free of cost by BHEL).	4.20	Sq.M	228.16	958.27
15	Providing and Fixing hard drawn steel wire fabric 75x25mm mesh of weight not less than 7.75 Kg per Sq.m to windows frames etc; including 62X19 mm beading of second class teak wood.	40.00	Sq.m	657.95	26,318.00
16	Applying two coat of synthetic enamel paint of given shade over a coat of primer to new wood work including scraping the surfacess, cost of all labour, tools and other incidentals etc.complete. (Only synthetic enamel paint will be supplied by BHEL at BHEL stores).	40.00	One Sq.m	10.28	411.20
17a	Fabrication 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 rivets and electrodes for site welding as necessary and all site connections comprising sag rods, floor beams, girders, bracings, trusses and frame work for fixed false ceiling and for movable false ceiling, purlins with channel / angles, MS flat supports including all connections as per detailed drawings connected steel works etc., cleats, gusset plates, all bolts, nuts, washers, base plates, anchor bolts as per detailed drawings, cutting, welding and painting 2 coats of red-oxide primer before erection etc., complete. The rate shall include painting 2 coat of Red-oxide as per IS specifications and all charges for handling, leading and loading at the fabrication yard. The raw structural steel sections, electrodes, gasses will be issued by BHEL on FREE of cost at their stores.	8.40	MT	6,847.05	57,515.22
b	Erection of Steel work out lined in item No.27a above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site rivetting, bolting, jointing and site welding where ever required.	8.40	MT	3,047.10	25,595.64
c	Painting at site of all structural steel work with 2 coats of aluminium paint / synthetic enamel paint of approved shade to trusses, columns, girders, bracings etc., with aluminium paint or synthetic enamel paint as required etc., complete. The required paint only will be issued free of cost by B.H.E.L at their stores.	8.40	MT	539.97	4,535.75

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
18	Fixing of colour coated aluminium zinc alloy coated metallic hirib profile sheet of nominal 1015-1020mm effective cover width and 28-30 mm deep ribs with subtle square fluting in the five pan at nominal 202-205mm centre-to-centre. The end rib shall be designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. The feen material is manufactured out of nominal 0.45mm base metal thickness (BMT) or 0.5 mm TCT, Hi-Strength steel with minimum 550 MPa yield strength metallic hot dip coated with aluminium -Zinc alloy (55 % Aluminium ,45 % Zinc)as per AS 1397-Zincalume AZ150 (Min 150 Grams / Sq.Mt) Total on both sides) with colour bond steel quality paint coat as per AS/NZS 2728 type 3-4.The paint shall have a total coating thickness of nominal 35 µm, Comprising of nominal 20µm exterior coat on top surface and nominal 5 µm reverse coat on back surface over nominal 5µm primer coat on both surfaces of approved colour shade by concern authority.	334.00	Sq.m	67.78	22,638.52
19	Fabrication bending to shape and erection of rain water gutters at roof level including all materials going into the process of fabrication and fixing an integral part of steel work together with all rivets and electrodes for shop or site weldings necessary and all site conditions. The rate shall include removal of old/spoiled valley /eaves gutters, painting with one coat of red oxide to relevant ISspecification before erection and also for all charges for handling, loading and unloading of materials at fabrication yard. The work has to be executed at full height of the blocks. The rate shall include removal and refixing of A.C sheets and North light glazing.Valley gutter of 750 mm size using 3.15 mm to 5 mm thick plate made into required shape. The raw structural steel sections, electrodes, gasses will be issued by BHEL on FREE of cost at their stores.	12.00	RM	382.34	4,588.08

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
20	Providing & Fixing barge boards in required girth (200 mm horizontal, 200 mm vertical) with 0.50 mm color galvalume sheets upto a length of 2.50 M, fixed to steel members with self drilling / self stitching fasteners at maximum 500 mm c/c along the length of capping, flashing etc., complete as directed by Engineer-in-charge including the cost of galvalume sheets, fixtures, fittings etc., complete. - (Plain Galvalume Sheet will be issued Free of cost by BHEL at their stores).	52.00	RM	542.50	28,210.00
21	Flooring with 25mm or more thick rough Cuddapah / shabad stone of size 600mm X 600mm, set over base coat of 50 mm thick stone dust / Foundry dust , including pointing with cement mortar 1:3 duly filling joints nearly, including cost of all materials like flooring stone and water etc; complete. including seigniorage charges, labour charges for dressing of flooring stones etc; complete for finished item of work, For stone dust/Foundry sand payment will be made separately. (Available stone dust/ foundry to be utilised which will be free of cost).	80.00	Sq.m	222.89	17,831.20
22	Flooring in 25mm thick using 1 cement and 3 parts of granite stone chips of 3 to 10mm gauge (no sand) ellis pattern first sort including neat finishing , curing, cost of materials etc; complete.	100.00	Sq.m	115.27	11,527.00
23	Conveyance of excavated spoil up to a lead of 2 Kms, including loading , unloading and spreading etc. complete as directed by Engineer- in- charge.	35.00	Cu.M	56.41	1,974.35
24	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.	3.00	Cu.M	45.70	137.10
25	Providing and fixing false ceiling frame made out of 25 x 25 x 1.3 mm aluminium 'T' and wall angles in a grid pattern of 0.60 x 0.60 Mtrs suspended with 6 mm dia MS rounds with adjustable bolts etc., including cost of all materials, labour etc., complete - --Do-- with 19 mm thermocole board	155.00	One Sq. m	317.62	49,231.10
26	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement :2 fine sand) including testing of joints etc. complete - 300mm dia R.C.C pipe.	15.00	RM	338.75	5,081.25

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
27	Supply and fixing glazed steel windows and ventilators of approved make including supply and fixing 4 mm thick plain glass with best quality putty. MS handles and peg stays including painting with two coats of synthetic enamel paint over one coat of red oxide paint including supplying and fixing weldmesh 50 x 50 mm (8G x 8 g). The window section and fabrication shall confirm to I.S. 1038.	5.00	Sq.m	1,024.80	5,124.00
	Total PART-A				4,18,026.43
Part B - Water Supply and sanitary Fittings.					
1a	Supply & fixing 20 (3/4") mm dia Nominal Bore GI pipe, Class B 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. Make: Tata / Jindal / Zenith	6.00	R M	216.00	1,296.00
b	Do... 25 mm dia (1")	20.00	R M	272.00	5,440.00
c	Do... 40 mm dia (1")	10.00	R M	410.00	4,100.00
2	Supply & fixing "Marc" make oyster series brass bib cocks. With all accessories / Cat: MOY 1030.	20.00	Each	475.64	9,512.80
3	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 150 mmx100mm including cost of excavation, PCC 1:4:8, 75 mm thick, all materials, labour etc., complete.	4.00	Each	301.74	1,206.96
4a	Supplying ,laying ,jointing and testing 101.6 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 anysoil(except rock requiring blasting) up to 1524 mm(5'.0") depth and refilling with watering and tamping.	10.00	One RM	390.00	3,900.00
b	Supplying ,laying ,jointing and testing 152.4 mm (6") 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 anysoil(except rock requiring blasting) up to 1524 mm(5'.0") depth and refilling with watering and tamping.	30.00	One RM	526.00	15,780.00

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
5	Construction of brick masonry chamber of dimension 0.914 x 0.457 x 0.914 m (3' x 1'6" x 3') with brick in CM 1:6 including plastering over both sides with CM 1:4, 20 mm thick and fitted with light weight CI frame and cover of size 0.914 x 0.457 m in CM 1:4 including bed concrete of CC 1:4:8 and channeling with 1:2:4 of 15cm thick as required, including earth work excavation in all soils, refilling around the chamber removing the surplus earth etc. complete as directed. CI frame and cover of 40 kgs, including channeling.	3.00	Each	5,485.40	16,456.20
6	Supply & fixing in position PVC Pipes of 110 mm dia of 6 Kg/Sq. cm of approved quality and conforming to IS:4985/2000 with specials, accessories and approved sealing / jointing compound on the exterior of the inserted portion and jointing to MS gutters, including cost of all materials, sealing compound, labour etc., for all heights complete.	10.00	R M	305.00	11,370.00
7	Making Conection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a Floating coat of neat cement and making necessary channels for the drain etc; complete. - for pipes 100 to 230 mm diameter.	1.00	Each	164.30	164.30
8a	Supply & fixing of GM peet valves, heavy quality, ISI marked Leader/Zoloto make of nominal bore.				
bDo.... 25mm dia (3/4")	2.00	Each	698.00	1,396.00
cDo... 40mm dia (1")	1.00	Each	1,423.00	1,423.00
	Total PART-B				72,045.26
	Part C: Electrical Works				
1	Supply and Fixing of 8way single door steel sheet enclosure MCBDB, KSS type with 1no 32A TPN MCB & 4nos 10A SP MCBs, Internal wiring. Cat. No: DSDMSNHOS108, Make: Standard.	1	Nos	2,574.60	2,574.60
2	Shifting & Earthing of Equipment from nearest Earth riser with 50x6mm/ 25x3mm GI flat. Work includes supply and apply of Aluminium paint at each welding points.	30	Mts	22.75	682.50
3	Shifting, Fabrication and Erection of structural steel for equipment/cable tray support etc.including 2 coats of red oxide painting. Supply of red oxide paint is in the scope of contractor.	0.3	Ton	8,594.57	2,578.37

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
4	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.	21	Nos	267.34	5,614.14
5	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.	21	Pts	1,101.58	23,133.18
6	Supply, Erection and Testing of 230V ,12" dia(305mm), 50W, 900rpm, 1200cu.M/hr, Heavy duty Exhaust Fan. Make: USHA/GEC/CG/Almonard, 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)	2	Nos	2,599.80	5,199.60
7	Shifting and Erection of ICTPN sheet enclosure switches with HRC fuse links for machines.				
	a) 32A	1	Nos	413.00	413.00
8	Shifting and laying of LT power PVC armoured aluminium cable including Dressing				
	a) 4C X 16 /10/6/4sq.mm	250	Mts	12.00	3,000.00
9	Power cable termination including supply of cable glands & lugs(Copper/Aluminium).				
	a) 4C X 16 /10/6/4sq.mm	8	Nos	237.00	1,896.00
10	Supply of Indoor Industrial Type Tube light fittings of Philips Make (EBT) Type. Make: Philips Indoor Industrial Model No: TKC203 2XTLD 36W EBT	14	Nos.	2,460.00	34,440.00
11	Supply of Tube Lights suitable for the Tube Light Fittings of Philips make (Model No: TKC203 2XTLD 36W EBT) Make of Tube: Philips Model Type: CHAMP AR 36/54 Industrial Pkg	28	Nos.	45.00	1,260.00

S. No.	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
12	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.	14	Nos	495.60	6,938.40
13	Supply and Fixing of 230V, 150W Street Lighting Luminaire with 150W SON Tubular bulb. Fitting is to be provided with BHEL free issued GI Pipe neatly bent (120degrees) and fixed at a height of 5 Mtrs. / as per site Engineers instructions / as required by site conditions. Testing and commissioning. Make: Philips Model: SRX05 1xSON150W	3	Nos	6,531.72	19,595.16
14	Supply of 1400 MM Span Decorative Ceiling Fan with 2 feet (600mm) down rod & with 1 No. of Modular Fan Regulator Make & Model of Fan: CROMPTON (CG) MAKE 56" 1400MM AURA DECORATIVE CEILING FAN Make & Model of Regulator: Modular Fan Regulator by ROMA.	2	Nos.	1,675.00	3,350.00
15	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 electronic regulator (Contractor's scope - Item 14) on the Roma switch board.	2	Nos	325.92	651.84
					1,11,326.79
	Total value of work			Rs	6,01,398.48
Total : Rupees Six Lakhs One thousand Three Hundred and Ninety Eight and Forty Eight paise					

Note:

1	A penalty of 0.50 % of the gross value of work will be levied for every week's or part thereof delay in execution of work by the agency, subject to a maximum penalty of 10 % of gross value of the total work executed.
2	The rates are inclusive of all taxes and duties except Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents.

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		