



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-05/2012-13, Dt: 31.05.2012

PRICE BID

Item no.: 9

Name of work: Construction of toilets at Sub Contract Material Movement Cell.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	Dismantling brick masonry walls for all heights, removing and clearing the debris and caring away upto a 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.	1.00	Cu.M	355.88	355.88
2	Dismantling reinforced cement concrete / plain cement concrete and disposing of debris upto a lead of 2 Km including loading, unloading and spreading as directed by Engineer-in-charge etc. complete.	2.00	Cu.M	582.68	1,165.36
3	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.	28.00	Cu.m	103.40	2,895.20
4	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)	1.50	Cu.M	1,560.50	2,340.75
5	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 1:2:4 (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)	1.50	Cu.M	1,585.00	2,377.50
6	Coursed rubble masonry in second sort with hard stone in foundation and plinth with 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)	4.50	Cu.M	1,521.00	6,844.50
7	Providing and laying in position specified grade, of Reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - all work up to plinth level with 1:2:4 (1 cement : 2 coarse sand : 4 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	1,687.00	3,374.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
8	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 as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	10.00	Sq.m	130.40	1,304.00
9	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.	15.00	Cu.M	45.70	685.50
10	Conveyance of excavated spoil upto a lead of 2 Kms, including loading, unloading and spreading etc. complete as directed by Engineer-in-charge.	13.00	Cu.M	56.41	733.33
11	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)	7.50	Cu.M	1,808.00	13,560.00
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 etc. complete as directed by Engineer-in-charge. (Cement will be issued by BHEL on free of cost)	60.00	Sq.m	65.80	3,948.00
13	Supply and fixing of new urinary pans, "Parry ware" make, ceramic, Model (Cat 0575)- "New Magnum Urinal" (590 mm x 400 mm) along with all accessories, C.P spreader brackets etc., along with partition for Magnum Urinal ceramic, 'Z' type brackets to be screwed to the wall at the bottom. Colour - Silky Off - White etc. complete as directed by Engineer-in-charge.	2.00	Each	3,933.00	7,866.00
14	Supply and fixing with "Parry ware" make Cascade pedestal ceramic wash hand basin of size 550 mm x 440 mm and pedestal size 705 mm height, with center tap hole with all accessories like brackets, screws, PVC connections etc. complete. Colour: Silky Off - White etc. complete as directed by Engineer-in-charge.	2.00	Each	3,000.00	6,000.00
15	Supply and fixing of new "Parry ware" make Indian Water Closet, Orissa pan of size 580 mm x 410 mm - Open rim (Code No. C0109) including PVC Slim line Dual Flush tank (Cistern) of size 475 mm x 318 mm (Code No. C8109) with all accessories like Parry ware flush kit suitable for the above flush tank with all required accessories etc., complete. Colour: Silky Off - White etc. complete as directed by Engineer-in-charge.	2.00	Each	3,000.00	6,000.00
16	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.	1.30	Sq.m	1,445.00	1,878.50

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
17	Providing and fixing shutters along with frames for toilets that are 30 mm thick factory made PVC rigid foam paneled, door and shutters manufactured by M/s. Rajashri made from M.S. tube, 19 gauge thick, size 19x19mm for styles and 15x15mm for top and bottom rails, covered with heat molded PVC "C" channel of 5mm thick sheet and 30x50mm wide for styles and 5mm thick and 75mm wide PVC sheets for top rail and bottom rail either side and 5 mm thick, 20mm wide cross PVC sheet as gap insert for top rail and bottom rail, paneling of 5mm thick PVC sheet fitted with M.S. frame welded / sealed to the styles and rails with 5x30mm PVC sheet beading on either side and joined together with solvent cement adhesive etc. complete in all respects as per direction of engineer in-charge fixed to frames. This includes providing brass hinges, brass aldrops, brass tower bolts, brass handles and brass door stoppers (For W.C. and bathroom doors) etc. complete as directed by Engineer-in-charge.	2.00	Sq.m	1,830.00	3,660.00
18	Supply and fixing of toilet doors along with teak wood door frame of required size consist teak scantlings of 100 mm x 75 mm and flush door shutter and laminating both door frame and shutter with premium quality teak veneer in required colour and design and melamine polish. Flush door shutter shall be chemically treated and water/insect/borer proof and 30 mm thick. This includes providing brass hinges, brass aldrops, brass tower bolts, brass handles and brass door stoppers etc. complete as directed by Engineer-in-charge.	4.00	Sq.m	3,180.00	12,720.00
19	Supply & fixing "Jaquar" make Prismatic urinal flush valve for urinal pots (Cat. No. 51027) with all accessories etc. complete as directed by Engineer-in-charge.	2.00	Each	1,320.00	2,640.00
20	Supply & fixing "Marc" make Oriental series brass bib cocks, with all accessories / Cat: MOR 1030 etc. complete as directed by Engineer-in-charge.	2.00	Each	506.00	1,012.00
21	Supply & fixing "Jaquar" make Prismatic pillar cock for wash basins, with all accessories. (Cat: 031) etc. complete as directed by Engineer-in-charge.	2.00	Each	519.00	1,038.00
22	Supply & fixing "Marc" make Oriental series brass stop cock with all accessories etc. complete as directed by Engineer-in-charge.	4.00	Each	698.00	2,792.00
23a	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.	32.00	Sq.m	556.80	17,817.60

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
b	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, chambering, 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.	15.00	sq.m	3,070.92	46,063.80
24	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.	6.00	RM	108.70	652.20
25	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.	3.00	Each	200.00	600.00
26a	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. Make: TATA/JINDAL/ZENITH etc. complete as directed by Engineer-in-charge.	2.00	RM	131.00	262.00
b	.. Do... 20mm dia (3/4")	8.10	RM	146.00	1,182.60
c	.. Do... 25mm dia (1")	12.00	RM	191.00	2,292.00
27a	Supply & fixing of GM peet valves, heavy quality, ISI marked Leader/Zoloto make of nominal bore for 15 mm (1/2") dia etc. complete as directed by Engineer-in-charge.	1.00	Each	242.00	242.00
b	.. Do .. 20mm dia (3/4")	1.00	Each	327.00	327.00
c	.. .do ...25mm dia (1")	2.00	Each	482.00	964.00
28	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 as directed by Engineer-in-charge.	1.00	Each	321.00	321.00
29	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 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.	1.00	Each	6,000.00	6,000.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
30	Thorough cleaning of existing oil bound distemper paint/white washing with water by scrapers or any other suitable tools and applying one coat of oil based cement primer and applying 3 coats altek lappam one coat after drying the previous coat and sand papering and applying one coat of oil bound cement primer etc., complete as directed by the Engineer-in-charge. (Only OBD Paint will be supplied by BHEL) etc. complete as directed by Engineer-in-charge.	30.00	Sq.m	84.10	2,523.00
31	Supplying and fixing plain PVC pipe of 90 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.	16.00	R M	103.86	1,661.76
32	Supply & fixing PVC Ventilating cowl of 110 mm dia etc. complete as directed by Engineer-in-charge.	2.00	Each	14.00	28.00
33	Supply & fixing 12.7 mm PVC connection with brass union nut CP coated etc. complete as directed by Engineer-in-charge.	10.00	Each	67.00	670.00
34	Applying two coat of Synthetic enamel paint of given shade over a coat of primer to new wood work including scraping the surfaces, cost of all labour, tools and other incidentals etc. complete as directed by Engineer-in-charge.	4.00	Sq.m	20.00	80.00
35	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.	2.00	Each	75.80	151.60
36	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 as required, supplying and fixing one CI steps in brick masonry if necessary if necessary 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 etc. complete as directed by Engineer-in-charge.	2.00	Each	2,742.00	5,484.00
37	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 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.	15.00	RM	471.00	7,065.00
38	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.	2.00	RM	348.00	696.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
39	Constructing Brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand:6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design. - 0.91 M deep with S.F.R.C cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 Kg; fixed in cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete.(Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with FPS Bricks class designation 75 etc. complete as directed by Engineer-in-charge.	1.00	Each	4,170.00	4,170.00
40a	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 etc. complete as directed by Engineer-in-charge.	0.11	MT	7,563.80	832.02
b	Erection of Steel work out lined in item No.1 above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site riveting, bolting, jointing and site welding where ever required etc. complete as directed by Engineer-in-charge.	0.11	MT	3,241.60	356.58
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 etc. complete as directed by Engineer-in-charge.	0.11	MT	596.50	65.62

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
41	Supplying and fixing of Tracked Hi-rib single skin galvalume / Zinalume sheets of 0.5 mm thick. One Meter width and length upto 12 M 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 galvanized hex-head self drilling screws with integral washers and EPDM seals (4 fasteners per support) for sheet etc. complete as directed by Engineer-in-charge. (Including cost of galvalume sheets). - for roofing bare galvalume.	12.00	Sq.m	545.90	6,550.80
42	Providing & Fixing of top fixed, side hung of NCL Secular windows 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 150 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 4 mm thick, modi 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 etc. complete as directed by Engineer-in-charge.	1.50	Sq.m	4,046.00	6,069.00
	PART - II - Electrical works				
1(a)	Supply & Installation of lighting/fans wiring with 1.5 sq. mm copper conductor single core multi-strand PVC insulated cable run through rigid PVC pipe of suitable size (Sudhakar make) from switch board/FBD to individual points laid on wall/roof including earth continuity for all points with copper wire of 14 SWG with 5 A ceiling rose on teakwood round block. Fine cab / Finolex etc. complete as directed by Engineer-in-charge.	6.00	Point	372.00	2,232.00
(b)	---do--- for 10 Amps Power Switch cum sockets for chargers, pedestal fans and emergency lamps with 1.5 Sq. mm cable. Fine cab / Finolex etc. complete as directed by Engineer-in-charge.	2.00	Point	372.00	744.00
2(a)	Supply and fixing of 10 Amps, 250 V SPT switches for control of light fittings with ROMA, Code: 21 011 of Anchor make / North-West make fixed on a suitable Modular type concealed box with suitable top cover for item 1(a) etc. complete as directed by Engineer-in-charge.	6.00	Set	250.00	1,500.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
(b)	Supply and fixing of 230 V, 10 Amps switch cum sockets of ROMA code: 21 003 & 30 373 of Anchor make / North-West make fixed on a suitable Modular type concealed box with suitable top cover for item 1 (b) etc. complete as directed by Engineer-in-charge.	2.00	Set	400.00	800.00
3	Supply and installation of Energy efficient light fitting, T5 type 2 x 28 W industrial luminaire with 28W T5 Fluorescent lamps. This includes supply & fixing of down rods, round blocks, connecting the copper twin twisted wire from ceiling rose to fitting and other accessories. Make: Philips/Asian Electronics etc. complete as directed by Engineer-in-charge.	3.00	Set	1,800.00	5,400.00
4	Supply and installation of 300 mm (12") sweep exhaust fans, which includes assembling and testing of all fans. The fans are to be rigidly fixed to wall with suitable arrangement. Black colour, double ball bearing, low noise, white epoxy powder coated paint finish with bird guard. Make: Orient/Usha/Crompton etc. complete as directed by Engineer-in-charge.	2.00	Set	1,600.00	3,200.00
5	Disconnection of power supply and dismantling of existing light fittings, fans, power boards, cables and other accessories. The removed items are to be handed over to concerned section etc. complete as directed by Engineer-in-charge.	2.00	LS - 2 No. of toilets	500.00	1,000.00
	Total			₹	2,13,194.09
	Add increase in Vat 1% over the material cost (70% of Above value)			₹	1,492.36
	Total value of work			₹	2,14,686.45
Total : ₹ Two lakhs fourteen thousand six hundred eighty six and forty five paise only					

Note:

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