



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-01/2013-14, Dt: 03.05.2013

PRICE BID

Item no.: 4

Name of work: Misc. Machine Foundations and other concrete works in Factory area.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1	Demolishing R.C.C. work manually / by mechanically means including stacking of steel bars and disposal of unserviceable materials upto a lead 2.00 KM as per direction of Engineer - in - charge.	59.00	Cu.M	582.68	34,378.12
2a	Making pockets in cement concrete in factory floors including transporting all tools etc., and cleaning the site, disposing off all the broken concrete debris etc., complete as directed by Engineer-in-charge.	6.00	Cu.M	582.68	3,496.08
2b	Extra for cutting reinforcement bars manually / by mechanical means in R.C.C. or RB work (payment shall be made on the cross sectional area of R.C.C. or RB work) as per directions of Engineer - in - Charge for pockets and laying cable lines.	346.00	Sq.m	176.35	61,017.10
3a	Earth work in excavation 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.	176.00	Cu.m	103.40	18,198.40
3b	----do---- up to First additional depth of 1.50 M to 3.00 M.	121.00	Cu.M	122.30	14,798.30
3 C	----do---- up to second additional depth of 3.01 M to 4.00 M.	50.00	Cu.M	141.20	7,060.00
4	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sq.m on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposing earth to be leveled and neatly dressed for Hard Rock (Blasting prohibited) etc., complete as directed by Engineer-in-charge.	11.00	Cu.M	325.25	3,577.75
5	Filling 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 m lift upto 1.5 m etc., complete as directed by Engineer-in-charge.	16.00	Cu.M	45.70	731.20
6	Conveyance of excavated spoil upto a lead of 2 Kms, including loading , unloading and spreading etc. complete as directed by Engineer- in- charge.	99.00	Cu.M	56.41	5,584.59

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
7a	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 : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) .**	16.00	Cu.M	1,585.00	25,360.00
7b	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.**	24.00	Cu.M	1,560.50	37,452.00
8a	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 (machine foundations) 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.**	77.00	Cu.M	1,687.00	1,29,899.00
8b	Reinforced cement concrete work in walls (any thickness) including consolidation by vibrations for all works attached pilasters, buttersses, plinth and string courses, fillets, columns, pillars, piers, abutments, machine foundations, Posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement : with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) etc., complete as directed by Engineer-in-charge.**	9.00	Cu.M	2,047.50	18,427.50
9 a	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 (machine foundations) 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.**	55.00	Cu.M	1,641.30	90,271.50
9 b	Reinforced cement concrete work in walls (any thickness) including consolidation by vibrations for all works attached pilasters, buttersses, plinth and string courses, fillets, columns, pillars, piers, abutments, machine foundations, Posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement : with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size) etc., complete as directed by Engineer-in-charge.**	24.20	Cu.M	2,002.00	48,448.40
10	Reinforcement for R.C.C. work including straightening , cutting, bending, placing in position and binding all complete by cold twisted bars (BHEL will issue Tor Steel at BHEL stores on free of cost) etc., complete as directed by Engineer-in-charge.	9.00	M.T	4,003.00	36,027.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
11	Centering and shuttering including strutting, propping etc.; and removal of form for walls(any thickness) including attached pillasters, buttresses, plinth and string courses etc., complete as directed by Engineer-in-charge.	385.00	Sq.M	108.40	41,734.00
12	Plastering in Cement mortar of mix 1:4 (1 cement : 4 fine sand) 12 mm thick on concrete surfaces including cost of all materials neat finishing, labour, curing, etc., complete as directed by Engineer-in-charge.**	330.00	Sq.M	55.00	18,150.00
13	Finishing with Epoxy paint (two or more coats) of ASIAN or BERGER make at all locations prepared and applied as per manufactures specifications including appropriate priming coat, preparation of surface, cost of all materials etc.; complete on concrete work etc., complete as directed by Engineer-in-charge.	550.00	Sq.M	77.75	42,762.50
14	Providing structural steel works in single section fixed with or without connecting plate including cutting, hoisting , fixing in position and applying a priming coat of approved steel primer all complete and dismantling steel work in single sections including dismembering and stacking within 50 m lead in channels, angles, tees and flats. (for temporary barricade/enclosure) (Only Raw structural steel, electrodes, gases will be issued by BHEL at their stores)	4.00	MT	8,729.80	34,919.20
15	Fixing the old/ used A.C. sheets for barricading the foundation works and removing the same after the work is over for side walls in the Factory blocks and sheds and at all height including transportation of A.C. sheets and disposing off old sheets to a lead of 2 K.Ms. etc., complete as directed. (Required consumable materials will be supplied by BHEL free of cost at BHEL stores).	247.00	Sq.M	39.50	9,756.50
16	Supplying and filling in plinth with river sand under floors including, watering, ramming consolidating and dressing etc., complete as directed by Engineer-in-charge.	11.00	Cu.M	985.00	10,835.00
17	Providing and fixing hand rail of approved size using MS pipes of size 50 mm to 20 mm dia issued by BHEL on free of cost, by welding etc., to steel ladder railing, balcony railing, staircase railing and around machines /moulding pits including applying a primer coat of approved steel primer, cost of all labour, transportation of materials etc., complete as directed by Engineer-in-charge.	1,100.00	kg	29.15	32,065.00
18	Grouting of bolt pockets in Cement Mortar 1:1 including the cost of all materials, labour, curing etc., complete as directed by Engineer-in-charge.**	5.50	Cu.M	1,006.00	5,533.00
19	Grouting of bolt pockets with grout mix of specified proportion by the manufacturer, including cost of labour and incidentals etc., complete as directed by Engineer-in-charge. (The grout mix will be supplied free of cost by BHEL at BHEL stores)	9.00	Cu.M	1,072.38	9,651.42
20	Granolithic topping of 25 mm thick using 1 cement 1 granite chips of 10mm down graded laid over base concrete when it is green conditions and ironite finishing 12mm thick using a mix of 50Kg of ironite , 200 Kg of cement and 0.30 Cu.m of granite metal 6mm down graded including cost of form work, curing etc., complete as directed by Engineer-in-charge.**	55.00	Sq.m	295.50	16,252.50

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
21a	Supplying and fixing position 40 mm thick fibre glass covered by cotton cloth (netted) fixed in position and covered with aluminium perforated sheet above the insulation for the foundation including fixtures and accessories and cost of all materials, labour etc., complete. Rock wool shall be of standard quality etc., complete as directed by Engineer-in-charge.	38.50	Sq.M	580.00	22,330.00
b	Supply and fixing in position 60 mm thick / 30 mm thick in two layers thermocoal including cost of materials, labour etc., complete as directed by Engineer-in-charge.	38.50	Sq.M	426.00	16,401.00
22	Painting with bitumen paint 80/100 grade @ 1.2 kg/sq.m. for construction joints of flooring slab etc., complete as directed by Engineer-in-charge.	11.00	Sq.m	30.00	330.00
23	Concrete Drilling for Bolts:- Drilling of holes with electrical drilling machines in RCC / PCC, in various sizes as follows, including drilling of holes, cleaning of holes, removal and disposal of debris from site. The rate includes machinery, labour, tools and tackles, transportation etc., complete as directed by Engineer-in-charge.				
a)	16 mm drilling in 500 mm depth	8.00	Each	573.60	4,588.80
b)	20 mm drilling in 500 mm depth	8.00	Each	717.00	5,736.00
c)	25 mm drilling in 400 mm depth	5.00	Each	717.00	3,585.00
d)	30 mm drilling in 500 mm depth	5.00	Each	860.40	4,302.00
e)	40 mm drilling in 500 mm depth	5.00	Each	1,075.50	5,377.50
24	Concrete cutting in length with specific depth: Concrete cutting in length with electrical drilling machines in RCC / PCC, in various sizes as follows, including concrete cutting, cleaning of area, removal and disposal of debris from site. The rate includes machinery, labour, tools and tackles, transportation etc., complete as directed by Engineer-in-charge.				
a)	Concrete cutting 300 mm depth	14.00	R M	2,724.60	38,144.40
b)	Concrete cutting 400 mm depth	11.00	R M	4,302.00	47,322.00
c)	Concrete cutting 500 mm depth	11.00	R M	5,736.00	63,096.00
d)	Concrete cutting 800 mm depth	7.00	R M	10,755.00	75,285.00
25	Core Cutting of pockets in concrete of size 250 mm or Dia : Core cutting of pockets with electrical core cutting equipment in RCC / PCC, in various depths as follows, including core cutting pockets, cleaning of area, removal and disposal of debris from site. The rate includes hire charges of machinery, labour, tools and tackles, transportation etc., complete as directed by Engineer-in-charge.				
a)	250 Dia Core Cutting 200 mm depth	4.00	Each	2,868.00	11,472.00
b)	250 Dia Core Cutting 250 mm depth	4.00	Each	3,585.00	14,340.00
c)	250 Dia Core Cutting 300 mm depth	4.00	Each	3,943.50	15,774.00
d)	250 Dia Core Cutting 350 mm depth	4.00	Each	4,302.00	17,208.00
e)	250 Dia Core Cutting 400 mm depth	4.00	Each	4,660.50	18,642.00
f)	250 Dia Core Cutting 450 mm depth	4.00	Each	5,019.00	20,076.00
g)	250 Dia Core Cutting 500 mm depth	4.00	Each	5,377.50	21,510.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
26	Core Cutting of pockets in concrete of size 300 mm Dia : Core cutting of pockets with electrical core cutting equipment in RCC / PCC, in various depths as follows, including core cutting pockets, cleaning of area, removal and disposal of debris from site. The rate includes hire charges of machinery, labour, tools and tackles, transportation etc., complete as directed by Engineer-in-charge.				
a)	300 Dia Core Cutting 200 mm depth	4.00	Each	3,585.00	14,340.00
b)	300 Dia Core Cutting 250 mm depth	4.00	Each	3,943.50	15,774.00
c)	300 Dia Core Cutting 300 mm depth	4.00	Each	4,302.00	17,208.00
d)	300 Dia Core Cutting 350 mm depth	4.00	Each	4,660.50	18,642.00
e)	300 Dia Core Cutting 400 mm depth	4.00	Each	5,019.00	20,076.00
f)	300 Dia Core Cutting 450 mm depth	4.00	Each	5,377.50	21,510.00
g)	300 Dia Core Cutting 500 mm depth	4.00	Each	5,736.00	22,944.00
	Total value of work			₹	12,92,399.76
Total : ₹ Twelve lakhs ninety two thousand three hundred ninety nine and seventy six 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 or part there of subject to a maximum penalty of 10% of the gross value of work executed after the period of completion.
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		