



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

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-03/2012-13, Dt: 18.05.2012

PRICE BID

Item no.: 3

Name of work: Maintenance of External water supply, repairs to submersible pumps in Factory area and Administrative building area.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
1a	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.	150.00	One Cu.M	103.40	15,510.00
b	----do---- up to First additional depth of 1.50 M to 3.00 M.	30.00	One Cu.M	122.30	3,669.00
c	Excavation in foundations trenches or drains not exceeding 1.5 M in width or 10 sq.m on plan including dressing of sides and ramming of bottom lift upto 1.5 m , including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m .. Hard rock (blasting prohibited).	5.00	One Cu.M	332.45	1,662.25
d(i)	Cutting road and making good the same including supply of extra quantities of materials i.e., aggregate, moorum, screening, and labour required .. Bituminous portion	3.00	One Cu.M	1,081.80	3,245.40
d(ii)	... do .. Water bound macadam	2.00	One Cu.M	572.45	1,144.90
PART - B					
1a	Dismantling (GI pipe external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including staking of pipes within 50 meters lead as per direction of Engineer-in - charge : 15 mm to 40 mm nominal bore etc. complete as directed by Engineer-in-charge.	10.00	One R M	24.90	249.00
b	... do.. Above 40 mm nominal bore	100.00	One R M	29.05	2,905.00
2	Same as above for over head pipe lines etc. complete as directed by Engineer-in-charge.				
a	1 1/2" (40 mm) dia. Pipes	10.00	One R M	43.57	435.70
b	2" (50 mm) dia. Pipes	50.00	One R M	43.57	2,178.50

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
c	3" (75 mm) dia. Pipes	50.00	One R M	43.57	2,178.50
d	4" (100 mm) dia. Pipes	100.00	One R M	43.57	4,357.00
3	Dismantling GI over head lines including gas cutting.....etc. complete as directed by Engineer-in-charge.				
a	2" (50 mm) dia. Pipes	10.00	One R M	63.00	630.00
b	3" (75 mm) dia. Pipes	10.00	One R M	98.50	985.00
c	4" (100 mm) dia. Pipes	10.00	One R M	98.50	985.00
4	Dismantling the existing pipe lines, replacing and shifting them.....etc. complete as directed by Engineer-in-charge.	10.00	One R M	330.00	3,300.00
a)	2" (50 mm) dia. Pipes				
b	3" (75 mm) dia. Pipes	10.00	One R M	371.00	3,710.00
c	4" (100 mm) dia. Pipes	10.00	One R M	371.00	3,710.00
5	Conveying of C.I. Pipes and specials from stores to site including cost of loading, lowering into trenches, aligning and cutting of pipes to required length where ever necessary including jointing, testing etc., complete. (All C.I. pipes and specials, pig lead, hemp yarn, bolts and nuts, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge.	10.00	One R M	186.00	1,860.00
a)	6" (150 mm) dia. Pipes				
b)	8" (200 mm) dia. Pipes	10.00	One R M	186.90	1,869.00
c)	14" (350 mm) dia. Pipes	10.00	One R M	253.70	2,537.00
d)	16" (400 mm) dia. Pipes	10.00	One R M	253.70	2,537.00
e)	600 mm (24") dia. Pipes	10.00	One R M	304.44	3,044.40
6	Conveying of G.I. Pipes and specials from stores to site including cost of loading, unloading, lowering into trenches, cutting and threading wherever necessary, aligning including jointing and testing etc., complete. all as directed by Engineer-in-charge. (G.I. pipes and specials, pig lead, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge.	10.00	One R M	42.10	421.00
a)	1 1/2" (40 mm) dia. Pipes				
b)	2" (50 mm) dia. Pipes	10.00	One R M	42.10	421.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
	c) 3" (75 mm) dia. Pipes	10.00	One R M	52.10	521.00
	d) 4" (100 mm) dia. Pipes	10.00	One R M	52.10	521.00
7	Conveying of G.I. Pipes and specials from stores to site including cost of loading, unloading, lifting into position and fixing over head pipe line (up to 15.00 M height) including cutting and threading wherever necessary including jointing, testing etc., complete. all as directed by Engineer-in-charge. (G.I. pipes and specials, pig lead, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge. a) 1 1/2" (40 mm) dia. Pipes	10.00	One R M	63.15	631.50
	b) 2" (50 mm) dia. Pipes	10.00	One R M	63.15	631.50
	c) 3" (75 mm) dia. Pipes	10.00	One R M	78.15	781.50
	d) 4" (100 mm) dia. Pipes	50.00	One R M	78.15	3,907.50
8	Conveying, lowering and fixing of C.I. sluice valves, gun metal valves on C.I./G.I pipes lines at or below ground level all as directed by Engineer-in-charge. (Valves, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge. a) 1 1/2" (40 mm) dia. valves	5.00	Each	243.00	1,215.00
	b) 2" (50 mm) dia. valves	5.00	Each	243.00	1,215.00
	c) 3" (75 mm) dia. Valves	5.00	Each	403.00	2,015.00
	d) 4" (100 mm) dia. Valves	5.00	Each	403.70	2,018.50
	e) 6" (150 mm) dia. Valves	5.00	Each	872.70	4,363.50
	f) 8" (200 mm) dia. Valves	2.00	Each	872.70	1,745.40
	g) 12" (300 mm) dia. Valves	2.00	Each	1,274.70	2,549.40
	h) 14" (350 mm) dia. Valves	2.00	Each	1,274.70	2,549.40
9	Conveying, lifting into position and fixing non-return valves /C.I sluice valves/ Gun metal valves on C.I./G.I. over head pipe lines all as directed by Engineer-in-charge. (Valves, hemp yarn, bolts and nuts, washers, rubber packing, white lead etc., required for the work will be supplied free of cost by BHEL at their stores) etc. complete as directed by Engineer-in-charge. a) 1 1/2" (40 mm) dia. valves	2.00	Each	346.00	692.00
	b) 2" (50 mm) dia. Valves	2.00	Each	346.00	692.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
	c) 3" (75 mm) dia. Valves	2.00	Each	560.00	1,120.00
	d) 4" (100 mm) dia. Valves	2.00	Each	560.00	1,120.00
10	Providing assistance to Water supply operators for maintenance of water supply lines of all sizes ranging from 40 mm to 300 mm dia. at all heights of the blocks and buildings, below or above the ground level as desired by Dept., The scope of work includes repair of valves, replacing gland ropes, cleaning of valve chambers, laying of new lines, caulking the lead joints, dewatering of valve chambers, shifting of pipes and valves etc. from stores to work spot and vice versa wherever necessary etc. complete. All required materials will be issued by BHEL on free of cost at their stores. The rate quoted shall include cost of labour, tools and tackles, safety equipments as directed. The activity requires ONE skilled service, THREE semi-skilled services and TWO unskilled services are required for carrying out the above job per day for one operation etc. complete as directed by Engineer-in-charge.				
a	1 Skilled services required for carrying out the work mentioned.	287.00	One Oper.	639.50	1,83,536.50
b	3 Semi skilled required for carrying out the work mentioned.	287.00	One Oper.	1,778.10	5,10,314.70
c	2 Unskilled services required for carrying out one operation -For assisting the above jobs listed in item no:10 a & b.	287.00	One Oper.	1,090.20	3,12,887.40
	PART - C				
1	Maintenance of water storage reservoirs, adjacent areas by sweeping the area, cleaning the floors/removing the weeds, grass cutting and disposal of the debris/garbage at the nearest bins on the daily basis. (One operation requires one Un-skilled service) etc. complete as directed by Engineer-in-charge.	287.00	One operation	545.10	1,56,443.70
2	Maint. of water storage reservoirs by sweeping, cleaning the doors and side walls with coir brushes, removing the clay..etc.. complete as directed by Engineer-in-charge.	6.00	One operation	5,505.00	33,030.00
	a) Under ground reservoir 5.00 lakhs gallons capacity.				
	b) ---do--- 2.50 lakh gallons.	6.00	One operation	2,767.00	16,602.00
	c) ---do--- 1.00 lakh gallons.	6.00	One operation	1,754.00	10,524.00
	d) ---do--- 20,000 gallons (Admn. Bldg. pump house)	4.00	One operation	1,280.00	5,120.00
	e) ---do--- 5,000 gallons capacity.	4.00	One operation	640.00	2,560.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
	f) over head tank of 40 mt. height and 2.20 lakh gallons capacity (two component of each 1.10 gallons capacity).	3.00	One operation	14,136.00	42,408.00
PART - D					
1	Fabrication and fixing at site MS flanges including cutting, drilling of holes...etc. complete as directed by Engineer-in-charge. 4" (100 mm) dia. flanges	10.00	Each	299.00	2,990.00
2a	Making connection of GI distribution branch with GI main of following sizes by providing and fixing ' T ' including cutting threading the pipe etc., complete. 25 mm to 40 mm nominal bore etc. complete as directed by Engineer-in-charge.	6.00	Each	166.05	996.30
b	... do.. 2" (50 mm) dia.	6.00	Each	423.20	2,539.20
c	... do.. 3" (75 mm) dia.	6.00	Each	423.20	2,539.20
d	... do... 4" (100 mm) dia.	6.00	Each	423.20	2,539.20
3	Repairing the existing level indicator at a height of 40 M of the over head tank....etc. complete as directed by Engineer in-charge.	3.00	One operation	1,174.80	3,524.40
PART - E					
1a	Servicing of the submersible pump sets ranging from 7.5 to 12 HP including replacing the required spares (both Electrical & Mechanical), rewinding wherever required, testing and commissioning. The depth of the bore wells on an average of 150 Rft. The rate shall include lifting, erection, transportation from & to water works, to site, erection, testing & commissioning etc., complete. (The rate quoted shall include all materials for repairs, rewinding, required tools such as chain pulley, pipe wrenches, labour etc., and warranty for the bore should be 12 months from the date of commissioning or completion of work which ever is later etc. complete as directed by Engineer-in-charge.	8.00	One operation	8,250.00	66,000.00
b	Servicing of the submersible pump sets ranging from 1 HP to 2 HP including replacing the required spares both Electrical & Mechanical....	4.00	One operation	2,500.00	10,000.00
2a	Servicing/overhauling of centrifugal pumps including replacement of required spares and placing in position, testing and commissioning and with a warranty of 12 months period. The rate quoted shall include dismantling, transpiration, servicing and re-erection at site etc. complete as directed by Engineer-in-charge. a) 5 to 15 HP	2.00	Each	3,500.00	7,000.00
b	25 to 40 HP	2.00	Each	4,000.00	8,000.00
c	Spider washers	5.00	Each	1,020.00	5,100.00
d	63 amps 415 V ICTP switch.	5.00	Each	420.00	2,100.00
e	100 amps 415 V ICTP switch.	5.00	Each	960.00	4,800.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
3	Laying of PVC insulated and aluminium armored cable ranging from 35 Sq. mm to 70 Sq. mm etc. complete as directed by Engineer-in-charge.	20.00	One R M	14.40	288.00
4	Supplying and spreading of sand all around the cable to a thickness of 10 cms. Supply and laying bricks all along the cable on both sides, supply and laying of rough Shahabad stone of 30 Cms width and 12 mm thick on top of the brick and refilling the cable trench upto a level of 250 mm above ground level and providing cable markets at every 25 mtrs. etc. complete as directed by Engineer-in-charge.	50.00	One R M	18.00	900.00
5	3 core copper flexible submersible cable. 2.5 sq. mm of ISI make etc. complete as directed by Engineer-in-charge.	100.00	One R M	40.80	4,080.00
6	PVC insulation tape of standard width (of ISI make) etc. complete as directed by Engineer-in-charge.	15.00	Each	12.00	180.00
7	Supplying and fixing the spares for the control panel for the submersible pump sets of the make "L&T", cutter, hammer or Siemens etc. complete as directed by Engineer in-charge.				
a	Contractor kit 32 Amps, Model ML1.5/MI 3.	25.00	Each	480.00	12,000.00
b	H R C Fuse base 100/125 Amps, busbar type	10.00	Each	150.00	1,500.00
c	H R C Fuse links (TCP 100) 100 Amps	10.00	Each	150.00	1,500.00
8	Checking the electrical switch boards, panels, replacement of spares, laying and joining cables, repairing of motors at site and routine check up power points at all bore wells, Main water works, Bore well water works at LIG and 09 Block reservoir and any other allied electrical works in connection with water supply etc. complete. The electrician shall have necessary tools for checking and repairing at all heights. All required materials will be issued by BHEL at free of cost at their stores. The rate quoted shall include cost of labour, tools and tackles, safety equipments as directed. The activity requires one skilled service and one semi-skilled services are required for carrying out the above job per day for one operation etc. complete as directed by Engineer-in-charge.				

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
a	1 Skilled worker required for carrying out the work mentioned.	287.00	One Oper.	639.50	1,83,536.50
b	1 SSW required for carrying out the work mentioned.	287.00	One Oper.	592.70	1,70,104.90
	Total value of work			₹	18,57,477.85
Total : ₹ Eighteen lakhs fifty seven thousand four hundred seventy seven and eighty 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