

**DELHI DEVELOPMENT AUTHORITY**  
**ELECTRICAL DIVISION NO:07**

**Notice inviting Tender No:- 01 / EE / ED-7 / DDA / 2008-09**

Sealed item rate tender are re-invited for the following works from the approved and eligible contractors of DDA, CPWD, MES, P&T, Railway and specialised firms for S. No.-7 from the approved and eligible contractors of DDA, CPWD, and non-D.D.A. and non-C.P.W.D. contractors as per special conditions given below upto 3.00 P.M. which shall be opened on the same day at 3.30 P.M. at Ground Floor, Vikas Minar, New Delhi on indicated dates.

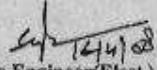
1. The tender shall be issued to the approved and eligible contractors of D.D.A. and C.P.W.D. from the office of CAU / NZ and centralized tender office at Vikas Minar, New Delhi.
2. The tender shall be also be issued to the non-D.D.A. and non-C.P.W.D. contractors from the office of the Executive Engineer (Elect.) Electrical Division No.7 / D.D.A. Keshavpuram, Delhi - 110035 provided they have satisfactorily completed three similar nature of works each of value not less than 40 % of the estimated cost in the last five years.

The tender documents can be held on any working day from the office of CAU / NZ / DDA, Ashok Vihar, and Sale Counter Vikas Minar New Delhi between the 11.00 to 3.00 P.M. on payment of amount of mentioned against each work (non refundable) on production of enlistment registration certificate and valid registration with works contract cell of Sales Tax Department of G.N.C.T.D. and tax clearance certificate issued by the works contract cell in Form-XI as well as the amount earnest money the shape of cash receipt treasury challan / deposit as call receipt of scheduled bank / fixed deposit receipt of a scheduled bank / demand draft of scheduled bank in favour of Sr. A.O. / CAU / N.Z. / DDA Sales of tenders form will be stopped four days (including the date of opening) before the date fixed for the opening of tender documents.

The manner of submission of tenders opening of the same and entry of contractor's. Their authorised representative to the place of opening shall be as provided in clause 3(a), (b) & 3(c) of PWD-6 forming part of tender.

#2#

S. No.	Name of work	NIT No.	Estimated Cost Earnest money	Tender Cost Time Allowed	Date of Sale Date of opening
1.	D/o Land at Narela Township, D/oa 450 Hect. Of land at Narela Phase-I. [SH: Supplying & Installation of clear water booster pump sets at Command Tank No.1 in Sector A-7, Narela].	(5)	<del>1,18,11,875=00</del> 2,36,234=00	<del>1000=00</del> 12 months	<del>25-04-08</del> 29-04-08

  
 Executive Engineer(Elect.)  
 Electrical Division No.-7  
 Delhi Development Authority

# SCHEDULE OF WORK

Name of Work : D/o Land at Narela Township,  
D/o 450, Hect. Of Land at Narela Project Phase - I  
SH : Supplying and Installation of clear water pump sets at command tank in Sector A-7, Narela

S.No.	Item	Qty.	Rate	Unit	Amount
1.1	<b>SUB HEAD - 1 (PUMPING INSTALLATION)</b> Supply, installation, testing & commissioning of Centrifugal horizontal split casing pump directly coupled through flexible coupling with suitable size of squirrel cage induction motor in T.E.F.C. enclosure, horizontal, floor mounted type continuous rating suitable for operation on 415V, three phase 50 Hz A.C. supply mounted on M.S. fabricated common base plate including coupling guard, foundation bolts, antivibration mounts etc. as required and as per specification attached. The pump set should be capable to perform the following duties.  Capacity : 1080 m <sup>3</sup> /hr Head : 26 Mtr. Speed : 1450 R.P.M. Type of liquid to be pumped : Clear Water				
1.2	Supply, erection, testing and commissioning of soft starter suitable for motors at Sr. No. 1.1 manual starting and running, provision for cable entry, including, Ammeter and ON/OFF indicators etc. as per specifications attached	6 set		Set	
		6 sets		Set	

1.3	Supply and fixing of following size of double flanged non-rising spindle type C.I. sluice valve including nuts, bolts, washers, rubber insertion, hand wheel, painting and testing etc. as required.				
	a) 400 mm dia	6 Nos		Each	
	b) 500 mm dia	6 Nos		Each	
	c) 800 mm dia	1 No		Each	
1.4	Supplying & fixing of following sizes of double flanged CI non-return valve without bypass arrangement, including nuts, bolts, washers, rubber, insertions, painting & testing etc. as required.				
	a) 400 mm dia	6 Nos		Each	
1.5.	Supplying and fixing of following size of 'B' class CI double flanged pipe with casted flanges including nuts, bolts, washers, rubber insertions, painting and testing etc as required.				
	a) 400 mm dia	33 Mt.		Mtr.	
	b) 500 mm dia	6 Mt.		Mtr.	
	c) 800 mm dia	20 Mt.		Mtr.	



1.6	Supplying and fixing 'B' class CI double flanged puddle pipe of following size i/c nuts, bolts washers, rubber insertions, painting and testing etc. as required.				
	a) 500 mm dia x 1500 mm long	6 Nos		Each	
	b) 600 mm dia x 1500 mm long	3 Nos		Each	
1.7	Supplying and fixing of CI double flanged dismantling joints of the following sizes including nuts, bolts washers, rubber insertions, painting, testing etc. as required.				
	a) 400 mm dia	6 Nos		Each	
	b) 500 mm dia	6 Nos		Each	
	c) 800 mm dia	1 No		Each	
1.8	Supplying and fixing of following sizes of CI double flanged 90° bend complete with nuts, bolts, washers, rubber insertions, painting and testing etc. as required.				
	a) 400 mm dia	6 Nos		Each	
	b) 500 mm dia	6 Nos		Each	

1.9.	Supply and fixing following size of CI double flanged 90° Duck Foot bend complete with nuts, bolts, washers, rubber insertion, painting and testing etc as required.	6 Nos		Each	
1.10.	Supplying and fixing of following sizes of CI all flanged tees with masonry support including nuts, bolts, washers, rubber, insertions, painting and testing etc. as required. a) 400 mm dia b) 800 mm x 800 mm x 400 mm dia c) 800 mm x 800 mm x 600 mm dia d) 800mm x 800mm x 800mm dia	6 Nos 3 Nos 1 No. 1 No.		Each Each Each Each	
1.11.	Supplying and fixing of following sizes of eccentric/ concentric type double flanged CI taper including nuts, bolts, rubber insertions, painting and testing etc. as required. a) 500 mm dia (Eccentric) x Suitable size of suction side of Pump. b) 400 mm dia (Concentric) x Suitable size of delivery side of Pump.	6 Nos 6 Nos		Each Each	
1.12	Supplying & fixing following size of CI-flanged bell mouth with strainer including nuts, bolts, washers, rubber insertions, painting & testing etc. as reqd. a) 500mm dia	6 Nos.		Each	
1.13.	Supplying & Fixing CI blind flange of the following size including nuts & bolts, washers, rubber insertions, painting and testing etc. as reqd. a) 450mm dia	3 Nos.		Each	

1.14.	b) 600mm dia	4 Nos.		Each	
	c) 800 mm dia	3 Nos		Each	
1.14.	<p>Supplying, erection, testing and commissioning of vertical centrifugal single stage non-clog type sump pump set with stainless steel strainer to prevent large size solid entering into pump with steel cover plate and one mtr. column pipe including providing and grouting the channel for the installation of pump and providing of float operated level switch for automatic starting / automatic stop. The total suspension length of the pump shall be one mtr. The pump shall be capable to perform the following duties.</p> <p>a) Discharge - 10 Cubic mtr./hr/  b) Head - 10 Mtr.</p>				
1.15.	<p>Supplying, erection, testing and commissioning of portable submersible dewatering centrifugal pump set suitable to give discharge of 25 mtr<sup>3</sup>/hr at a head of 10 mtr. complete with submersible cable of 4x2.5 mm<sup>2</sup> size, 50 mtr. in length from starter to motor, link chain with hook of suitable length for handing the pump in underground reservoir. The pump shall be supplied with flexible hose pipe of suitable size and 15 mtr. length and fixed to the delivery end of the pump by means of stainless steel clamps.</p>				
1.15.	<p>Supplying, erection, testing and commissioning of single bridge girder carrying two wheel at each end of the span, the bridge have a geared shaft &amp; pulley, connecting to opposite wheel of span, to maneuver the long travel motion of the bridge, by mean of chain and hand operated traveling crane of minimum 5 tones capacity along with geared chain pulley block, mechanical brake, trolley and</p>				
1.16.		1 Set		Set	

	connected accessories etc. complete as required and as per specification enclosed.				
	<b>SUB HEAD - II CABLING</b>				
2.1.	Supply of the following sizes of XPLE armoured aluminium conductor power cable of 1.1 KV grade i/c testing etc. as required. a) 3 x 240 sq. mm	150 mtr.		Mtr.	
2.2	Laying of one number PVC insulated XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 400 sq.mm in the existing masonry open duct/existing cable tray/Surface of wall/in RCC/GI pipe etc. as reqd.	150 mtr.		Mtr.	
2.3.	Supplying and making end termination with brass compression gland and aluminium lugs of following sizes of XLPE aluminium conductor cable of 1.1 KV grade as require.	12 sets		Set	
2.4.	Fabricating and installing following sizes of perforated M.S. Cable tray including horizontal and vertical bends, reducers, Tees, cross member and other accessories as required and duly suspended or with necessary support including painting etc. as required. a) 150 mm width x 50 mm depth x 1.6 mm thickness.	60 Mtr.		Mtr.	
	<b>SUB HEAD - III SAFETY EQUIPMENTS</b>				
3.1.	Supplying and fixing of ISI marked (IS-2878) carbon dioxide type portable fire extinguisher with cylinder fully charged of 4.5 kg. capacity complete with bakelite horn discharged tube, GI bracket for wall mounting etc. as required.	5 Nos.		Each	



3.2.	Supplying and fixing of 3 Nos. fire buckets of 9 ltrs. Capacity each mounted on suitable MS stand made of angle iron of size 35 mm x 35mm x 6 mm thick.	2 Set		Set	
3.3.	Supplying and laying chequered / corrugated, red/ black rubber mat sheet ISI marked of size 2000 mm x 1000 mm x 6.5 mm thick for 1.1 KV grade as required.	6 Nos		Each	
3.4.	Providing & fixing of following safety materials : a) First Aid Chart - 2 Nos b) First Aid Box - 1 No c) Caution Board - 1 No d) Key Board - 1 No				
	<b>SUB HEAD - IV EARTHING</b>	1 Set		Set	
4.1.	Earthing with G.I. earth plate 600mm x 600mm x 6mm thick i/c accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal and salt) as required.	4 Sets		Set	
4.2.	Extra for using salt and charcoal for G.I. or copper plate earth electrode as required.	4 Sets		Set	
4.3.	Providing and fixing 25 mm x 5 mm G.I strip in 40 mm dia GI pipe from earth electrode as required.	20 Mtr.		Mtr.	
4.4.	Providing and fixing 25 mm GI strip on surface or in recess for connection etc. required.	100 Mtr.		Mtr.	

## **ADDITIONAL TERMS AND CONDITIONS**

### **1. GENERAL**

- 1.1 The contractor must get acquainted with the proposed site for the work and study specifications & conditions carefully before tendering. The work shall be executed in close coordination with the progress of building work. If the site or part of the site is not available for any reason the programme of execution shall be modified accordingly and the agency shall have no claim except provided in the printed conditions of the contract.
- 1.2 The work, as indicated in the schedule of work attached herewith including any modification/addition/alteration ordered subsequently, shall be carried out as per the specification indicated below and in the following order of precedence.
- i) Indian Electricity rules 2005 amended upto date.
  - (ii) Technical specifications attached herewith.
  - iii) CPWD general specifications for electrical works ( part-1 ) Internal 2005, (Part-II) External 1994 with correction slips upto the date of the tender.
  - iv) Relevant BIS standards as modified upto date.

### **2. TENDER OPENING:**

The tenderer shall submit the bid in two separate sealed envelopes, viz, one containing technical bid and the other containing price bid. Both the bids should be submitted simultaneously. The name of the work and also the word "Technical Bid only" or "Price Bid only" as the case may be clearly written on top of the respective sealed covers. If the tenderer did not submit the tenders in the prescribed as stated, the tenders shall be summarily rejected.

#### **Part I: Technical Bid :**

In the technical bid, bidder will submit

- i) All data as required in the technical specification.
- ii) PWD-8, Addition Conditions & Technical Specifications.

**Part-II Price Bid:**

- i) Unit rates of all items duly filled in schedule of work.
- 2.1 The technical bid shall be opened first on the due date and time as notified, in the presence of tender(s) or their authorized representative(s), who may wish to witness the opening.
  - 2.2 Security of the technical bid shall be done by the department. Necessary clarification, as may be required, shall be furnished by the tenders within the time given by the department for the same.
  - 2.3 Financial implications, if any, due to any change done in the technical bid during the technical negotiations shall be given by the tenderers in a separate sealed cover, indicating the financial effect to the extent of deviations in their respective technical bid but shall not be allowed to amend/modify the original price bid.
  - 2.4 The original price-bid along with financial implication due to technical deviation, if any submitted by the tenderer shall be opened on the date and time (which shall be duly notified to the tenders) price bids of only those tenderers shall be opened whose technical bids are found acceptable.
  - 2.5 Design criteria given in the Technical Specifications is the only basis of evaluation of technical bid. No weightage of any kind shall be given, if the tenderer claims to meet better specifications.
  - 2.6 The rates quoted by the contractor shall be firm and inclusive of all Central/State Govt. Taxes, Duties levies, etc. except service tax. No escalation in tendered rates shall be permitted. However, service tax wherever applicable be reimbursed to the Agency on the submission of proof of payment to the concerned Department.

2.7 Concessional Sales Tax form C/D shall not be issued by the Department.

**3. SCOPE OF WORK:**

The following shall be deemed to be included within the scope of work.

- i. All minor building work i/c making of opening in walls/floors either RCC or brick masonry and restoring them to original condition and finish.
- ii. Responsibility to ensure safety of materials against pilferage & damage till the installation are handed over to the department.

**4. WORKS TO BE ARRANGED BY DDA:**

DDA shall be responsible for the following works only and these are excluded from the responsibility of the contractor:

- a) Provision of adequate storage space for material.
- b) Foundations for pump sets shall be constructed as per design approved.

**5. DRAWING AND DATA :**

- i) The contractor shall furnish the following drawings and data to the Engineer-in-charge, for approval within 15 days of award of work.
  - ii) General arrangement drawing showing the location of all equipments to be installed.
  - iii) The correction/changes, if any, intimated by the Engineer-in-charge shall be incorporated and 3 sets of corrected drawings shall be furnished to the Engineer-in-charge for approval within 7 days from the date of intimation.
- The work shall be executed in accordance with the approved drawings

**6. INSPECTION BEFORE DESPATCH:**

- i) All routine and type tests prescribed in relevant BIS specifications shall be conducted before dispatch of equipments. No equipment shall be dispatched from the manufacturer's premises without such tests being conducted and test



result recorded. These test certificates shall be given along with the supply of equipments. The Engineer-in-charge shall, if he so desires inspect and witness the pre-delivery tests. For this purpose, the contractor shall give 15 days advance information. Department shall bear expenses for inspection as far as travelling and boarding/lodging is concerned.

- ii) Prior despatch, all equipments shall be adequately protected for the whole period of transit, storage & erection against corrosion and incidental damages etc. from the effect of vermin, sunlight, rain, heat and humid climate.

**7. ELECTRICITY & WATER FOR ERECTION**

The contractor shall make his own arrangement for temporary connection for power supply and water supply required for erection as well as for his site office/godown/store room/staff/labour. The charges for consumption of power/water shall be regularly paid by the contractor to concerned authorities. Department will issue necessary certificates to enable contractor to approach the concerned authorities for temporary connection for power/water on contractor's written request which should be made well in advance.

**8. PAYMENT TERMS:**

The following percentage of contract rates shall be payable against the stages of work shown herein:

Stage of work	Machinery and equipment (pumps and electrical panel)	All other items
I After initial inspection (wherever specified) and delivery at site in good condition on pro- rata basis	80%	70%
II On completion of pro-rata installation	10%	20%
III On testing, commissioning and handing over.	10%	10%

**9. INSURANCE:**

The contractor shall include storage cum erection insurance right from the storage to commissioning of various equipment. All insurance which the contractor is required to enter into under the contract shall be effected with any recognized insurance company and the contractor shall produce the policies of insurance.

**10. REMEDY OF FAILURE TO INSURE:**

If the contractor fail to effect and keep in force the insurance referred to in the proceeding sub-clause the department may effect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount, so paid by the department, from any money due or which may become due to the contractor or recover the same as debit from the contractor's bill.

**11. SUPPLY OF MATERIAL:**

Supply of material shall be phased in such a manner that erection work is not hampered for want of material. After award of work successful tenderer shall submit detailed programme bar chart for supply of material, erection, testing, commissioning and handing over of installation.

- i) Suitable and open storage accommodation shall be provided by the department free of cost to the contractor. However temporary structure, if required by the contractor for safe & lockable storage of the material shall be allowed at his own cost.
- ii) All tools and tackles required for unloading of the equipment and erection at site shall be responsibility of the contractor.

- iii) Materials to be used in the site of works shall be ISI marked, where material bearing ISI Marked, are not available, material conforming to ISI shall be used with prior approval of the Engineer-in-charge.
- iv) The department will not be liable for any damage, losses and compensation payable at law in respect of or in consequence of any accident or injury to any person.

**12. QUALITY OF MATERIAL AND WORKMANSHIP:**

All parts of the equipment shall be of such design, size and materials so as to function satisfactorily under all rated conditions of operation. All components of the equipments shall have adequate factor of safety. The work of fabrication and assembly shall conform to sound engineering practice and on the basis of "Fail Safe Design". The mechanical parts subject to wear and tear shall be easily replaceable type. The construction of the equipments shall be such as to facilitate easy operation, inspection, maintenance and repairs. All connections and contacts shall be designed to minimize risk of accidental short circuits caused by animals, birds and vermin etc. All identical items and their component parts should be completely, interchangeable including spare parts.

**13. INSPECTION AND TESTING AT SITE:**

- i) The installation shall be subject to necessary inspection during every stage of erection, by the Engineer-in-charge or his authorized representative. The tenderer shall provide all facilities and assistance for the purpose.
- ii) The completed installation shall be inspected and tested by the Engineer-in-charge in the manner as will be laid down by him, in consultation with the contractor.
- iii) All instruments and facilities necessary for the tests shall be provided by the contractor.

**14. COMPLETENESS OF TENDER:**

All sundry equipment, fittings, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.

**15. GUARANTEE:**

**15.1** All equipments shall be guaranteed for a period of 12 months, from the date of taking over the installation by the department, against unsatisfactory performance and/or break down due to defective design, workmanship or material. The equipments or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-charge. In case it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in-charge in this regard shall be final & binding on the contractor.

**15.2** The tender shall guarantee among other things, the following:

- a) Quality, strength and performance of the materials used as per manufacturers standards.
- b) Safe mechanical and electrical stress on all parts under all specified conditions of operation.
- c) Satisfactory operation during the maintenance period.

**16. COMPLETION PLAN & DATA:**

The contractor shall give three copies of completion plans & data as per details below.



Within one month after actual date of completion failing which an amount @ of 1% of tendered cost subject to maximum of Rs.25,000/- shall be deducted from any amount due to the contractor.

- i) Electrical wiring diagram.
- ii) Detailed schedule of maintenance.
- iii) Lubrication chart / operation manual.
- iv) Manufacturer operation manual.
- v) Spare parts manual.

17. A table indicating the makes acceptable in respect of some of important materials is attached. The contractor will use any of makes specified in the table against a particular item subject to conformity with specification and contractor shall however take prior approval of the Engineer-in-charge. For materials not covered in above mentioned table any BIS marked product may be used and if same is — not available, then it shall conform to relevant BIS code.

**Executive Engineer (E)**  
**Electrical Divn. No.07/DDA**

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- 2.2 Scrutiny of the technical bid shall be done by the department. Necessary clarification, as may be required, shall be furnished by the tenderers within the time given by the department for the same.
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