

SCHEDULE OF WORK

Name of work : M/O pump Set at various places under North Zone  
 Sub head : R/M of submersible pumpset, Panel board/feeder pillar & other E & M installation  
 In Sector B-2, B-4, A-5, A-6, A-98 A-10 at Narela.

S.No.	Description of items	Qty.	Unit	Rate	Amount
1-	Lifting of the submersible pumpset from the existing bore well alongwith GI pipe, band, submersible cable & other accessories i/c dismantling the GI pipe & pumpset etc. complete as reqd.	20	J		
2-	Lowering of submersible pumpset in the existing borewell alongwith GI pipe, submersible cable, wire rope upto required depth i/c making water proof cable joint connection, testing etc. complete as reqd.	20	J		
3-	Repairing of submersible pumpset (6" dia)/(4" dia) 3 phase 415 volts i/c supplying & replacement of the following defective parts of motor & pump reassembling painting, testing etc. complete as reqd. <u>Motor side:</u>				
a)	Re-winding of submersible motor of 6" dia, 7.5 HP.	4	Nc		
b)	Re-winding of submersible motor of 6" dia, 6.00HP	7	Nc		
c)	Re-winding of submersible motor of 4" dia, 5.00HP	10	N		
d)	Rotor sleeve.	20	N		
e)	Water seal.	20	N		

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D  
OV

(a) Internal Electrical Installation

- f) Gun metal bearing bush. 44 Nos.
- g) Thrust bearing. 20 Nos.
- h) Thrust plate. 20 Nos.
- i) Sand guard. 18 Nos.
- j) Coupling sleeve with key, 17 Nos.
- k) Balancing of rotor. 10 Nos.
- l) Rotor sleeve turning & grinding. 16 Nos.
- m) Rotor and repairing & key way making. 16 Nos.

PUMP SIDE.

- a) Gun metal impeller. 32 Nos.
- b) Remetalling of gun metal impeller. 30 Nos.
- c) Guide bush. 34 Nos.
- d) Distance bush. 36 Nos.
- e) GGM neck ring. 35 Nos.
- f) Pump shaft for 6" dia pumpset. 8 Nos.
- g) Pump shaft for 4" dia pumpset. 6 Nos.

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- 1) Sand Guard. 20 Nos.
- 2) N.R.V. body. 6 Nos.
- 3) N.R.V. body 4" dia. 6 Nos.
- 4) N.R.V. repairing. 10 Nos.
- 5) Stage bowl C.I. 20 Nos.
- 6) Suction chamber of 6" 8 Nos.
- 7) Suction chamber of 4" 6 Nos.
- 8) E.V. Impeller. 10 Nos.
- 9) E.V. stage bowl. 10 Nos.
- 10) Upper bush 6" 9 Nos.
- 11) Upper bush 4" 9 Nos.

4- Supply & replacement of U.L. starter MK-1 type suitable for upto 7.5hp pumpset on the existing panel board/feeder pillar i/c connection, testing etc. complete as reqd. 10 Nos.

5- Supply & replacement of water proof sub.copper cond. cable of size 1x3x1.5sq.mm i/c S/F cable clips, making connection, cable jointing and testing etc. complete as reqd. 280

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*GRUB*

Supplying and fixing of the following size of GI pipe B-Class flanged type with necessary pipe fittings, bend, etc. as reqd. 65 mm dia.

15mt

50mm dia.

18mt

Supply & replacement of the following spare parts and material in the existing panel board i/c connections, testing etc. Voltmeter (0-500) volts, sq. type, (96mmx96mm).

10 n

Ammeter (0-30) amp., sq. type, (96mmx96mm)

10 n

32 amp. TP&N MCB (C-Series)

8 Nc

32 amp. TP&N MCB (C-Series)

10 n

16 amp. DP MCB (B-Series)

10 n

Dismantling of submersible P./Set upto 10 HP capacity for checking and assessment of parts to be replaced/repaired i/c Motor side.

20 l

Pump side.

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प्रमाणित किया जाता है



(95)  
INVENTORY

Part - A

(i) Booster pumps

- (a) ...N11... HP Centrifugal pumpset ..... Nos.  
 (b) ...N11... HP Vacuum pump for priming of above pumpset ..... Nos.  
 (c) Control panel comprising of .....  
 (d) Details of valves .....

Part - B

(i) D.G. Set

- (a) Capacity .....30... KVA to 125 KVA 10 Nos.  
 (b) Control panel comprising of AVR, Volt meter, Ammeter change over switch & MCB's etc.

Part - C

(i) Submersible pumps

- (a) 5 to 7.5 HP Submersible pumpset 28 Nos.  
 (b) Control panel comprising of Volt meter, Ammeter, DOL starter, bus bar, MCBs etc.

Part - D

- (i) Water level indicator -

Part - E

- (a) Internal Electrical installation .....  
 (b) External Electrical installation .....  
 (compound lighting etc.) -

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J E (E)

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A E (E) - I | E1d-7

*Signature*  
बॉम्बार्डर वरिष्ठ  
विद्युत धन्य-दास  
वि० वि० १० वाईड रोड

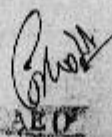
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A E (E)

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A E (E)

ADDITIONAL CONDITION & SPECIFICATIONS

- 1- The contractor must get acquainted with the proposed site for the work & study specifications & conditions carefully before tendering. The work shall be executed as per programme approved by the Engineer-in-Charge. No claim for any idle labour or compensation (except as provided under clause 10-C/1000 as applicable in the printed conditions of contract) shall be entertained.
- 2- The work as indicated in the schedule of work attached herewith i/c any modification/alternation ordered subsequently shall be carried out as per the specification indicated below :-
  - a) CPWD specification for electrical works (Part-I), Internal-2005(Part-II), external 1994 with correction slips upto the date of tenders.
  - b) Relevant BIS as modified upto the date wherever BIS code do not exist the British Standard should be followed:-
- 3- Nothing extra shall be paid on account of cartage.
- 4- No T & P shall be issued to the agency by the Deptt. for the execution of work.
- 5- Water and electricity for the execution of work shall be arranged by the firm through their own arrangement and charges if any shall be borne by them.
- 6- Testing of the installation shall be done by the contractor within the quoted rates. The arrangement of labour/material required for testing shall be arranged by the firm within the quoted rates;
- 7- Time allowed for carrying out of the work shall 12 month.
- 8- The worn out parts of sub.P.Set/ D.C.Set to be replaced shall be of the same make as that of pumpset.
- 9- The contractor shall stand guarantee for a period of 6 months for material supplied/installed against manufacturing defects/satisfactory performance from the date of completion/ handing over whichever is later on a non judicial stamp paper of Rs.50/-
- 10- The contractor has to return the dismantled material to the Deptt. after replacing the defective items at site suitable rebate for dismantled material may be offered (if required).
- 11- Proper handing/taking over of all the BEM installation for repairing shall be carried out by JB(E)/A.E.(E) incharge of the work and the contractor in writing immediately after award of work and before start of work. The same shall be handed over to the Deptt. in proper working condition after expiry of the contract.
- 12- The contractor shall take all safety measures at site during maintenance / repairs of the installation.

- 13- The contractor shall deploy trained and competent staff to the satisfaction of Engineer-in-Charge.
- 14- Any injury / mishap to the staff during duty hours will solely to the liability of the contractor.
- 15- The Engineer-in-Charge if so desire, may extend the contract upto 2 months or terminate the contract at any time after giving 15 days notice for which no compensation shall be paid.
- 16- All electric connections shall be checked atleast once in a month and set right if required.
- 17- Testing of the installation shall be done by the contractor. The arrangement of labour/material required for testing shall be arranged by the contractor within the quoted rate.
- 18- The following makes of the materials are acceptable :-
  - a) Ammeter/Voltmeter : IS-1248 - AE/UEL/ IMP.
  - b) GI pipe : IS:1239- Hammer(Hissar), TATA, Surya.
  - c) M.C.B. : IS-8828 - Standard/Indo Kopp/Action with 10 KVA Capacity.
  - d) PVC insulated FR copper wire: IS:694-Skytone/National/ECKO/Havell's.
  - e) B.O.L. Starter : L&T/Siemens/Outler Hammers
  - f) PVC sheathed, PVC insulated flat submersible copper cable: IS: 694- Plaza/Finolex/Safex.
- 19- The contractor has to submit the test certificate of all items in the schedule of work (if required).
- 20- The clause IOC or IOCC shall not be applicable in this contract;

14/11/97  
 कर्मचारी काउन्सिल  
 विद्युत विभाग-राज्य  
 नई दिल्ली-110002