



FOR SPECIALIZED WORK
NOTICE INVITING TENDER
(E – TENDERING MODE)

Item rate tenders are invited on behalf of Delhi Development Authority from registered contractors of DDA/CPWD /B.S.N.L./ Railway/ M.E.S. for issue of tenders for the following work on behalf of DDA by the Ex. Engineer (Elect.) Electrical Division No – 12, DDA.

Name of Work	:	M/O Pump set & E.I. Various Places at Dwarka.
SH	:	Running, Maintenance & Operation of clear water booster pump sets, submersible pump sets, D.G. Sets & Electrical Installations at command Tank No.-2 at sector-3 and Tubewell No.T-2 & T-3 at Sector-5, Dwarka.

- 1 The work is estimated to cost **Rs.15,35,434/-** This estimate, however, is given merely as rough guide.
- 2 The intending tenderers shall have experience for successfully completed one similar work of value not less than 80% of the estimated cost put to the tender OR two similar works of each of value not less than 60% of the estimated cost put to the tender **or** three similar works of each of value not less than 40 % of the estimated cost put to the tender during last **seven** years ending last of the month previous to the one in which applications are invited.
- 3 Agreement shall be drawn with successful tenderer on prescribed form attached. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 4 The time allowed for carrying out the work will be **12 months** from the date of start as defined in Schedule F or from the first date of handing over the site, Whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 5 The site for the work is available or as specified in the additional conditions attached.

- 6 The contractor, whose tender is accepted, will be required to furnish performance guarantee of 5 % (Five percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs 10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1, 00,000) or Government securities or fixed Deposit Receipts or Guarantee Bonds of any Scheduled bank or the State Bank of India in accordance with the prescribed form.
- 7 Intending Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract document. Submission of a tender by tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant etc will be issued to him by the government and local conditions and other factors having a bearing on the execution of the work.
- 8 The competent authority on behalf of DDA does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected
- 9 Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.

- 10 The competent authority on behalf of DDA reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 11 The contractor shall not be permitted to tender for works in the DDA Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives of any Gazetted officer in DDA or in the Ministry of Urban development. Any breach of this condition by the contractor would render him liable to be removed from approved list of contractors of this department.
- 12 No Engineer of gazetted rank or other Gazetted officer employed in engineering or Administrative duties in an Engineering department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from the Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found anytime to be such a person who had not obtained the permission of the DDA as aforesaid before submission of the tender or engagement in the contractor's service.
- 13 The tender for the work shall remain open for acceptance for a period of ninety (90) days from the date of opening of tender/ninety days from the date of opening of financial bid(strike out as the case may be). If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of tender which are not acceptable to the department, then the DDA shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re tendering process of the work.
- 14 This 'Notice Inviting Tender' shall form part of the contract document. The successful tenderer/contractor on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of :-
 - a) The Notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of

invitation of tender and acceptance thereof together with any correspondence leading thereto.

b) Standard NIT Form 8 or other Standard DDA Form as mentioned.

15 In case any discrepancy is noticed between the document as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall be come invalid and the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.

ITEM RATE TENDER AND CONTRACT FORM
FOR SPECIALIZED WORK

Name of Work	:	M/O Pump set & E.I. Various Places at Dwarka.
SH	:	Running, Maintenance & Operation of clear water booster pump sets, submersible pump sets, D.G. Sets & Electrical Installations at command Tank No.-2 at sector-3 and Tubewell No.T-2 & T-3 at Sector-5, Dwarka.

- i) To be submitted through E-Tendering up to 3.00 pm on AS PER ANNEXURE-II to Executive Engineer, Division 12
- ii) To be opened through E-Tendering at 3.30 pm on AS PER ANNEXURE-II by the Executive Engineer, Division 12

TENDER

I/ We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special condition, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the DDA within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the clauses of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of its opening / Ninety days from the date of opening of financial bid (strike out as the case may be) and not to make any modifications in its terms & conditions.

A sum of **Rs.30, 709/-** deposited in the account of Sr. A.O (CAU) is hereby forwarded in form of UTR of RTGS / NEFT /Bank Guarantee beyond 20 Lacs issued by a scheduled bank as earnest money. If I/we, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said DDA or his successors in

office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence work as specified, I/we agree that DDA or its successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re tendering process of the work.

I/we undertake and confirm that eligible similar work(s) has/have not got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of the Department, then I/we shall be debarred for tendering in DDA in future for ever. Also, if such a violation comes to the notice of the Department before the date of start of work the Engineer-in-charge shall be free to forfeit the entire amount of earnest money deposit /performance guarantee.”

I/we hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/ confidential documents and shall not communicate information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Signature of witness

Name:

Address:

Occupation:

Signature of contactor

Name:

Address:

A C C E P T A N C E

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the DDA for a sum of Rs. _____ * _____ (Rupees _____ * _____
_____)

The letters referred to below shall form part of this contract Agreement:

- i)
- ii)
- iii)

For & on behalf of Delhi Development Authority

Signature _____

Designation: Executive Engineer

Division _____ * _____

FOR SPECIALIZED WORK**INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING
FORMING PART OF NIT AND TO BE POSTED ON WEBSITE**

Item rate tenders are invited on behalf of Delhi Development Authority from registered contractors of DDA/CPWD /B.S.N.L./ Railway/ M.E.S. for issue of tenders for the following work on behalf of DDA by the Ex. Engineer (Elect.) Electrical Division No – 12, DDA.

1	NIT No.	:	14 /EE/ED-12/DDA/2013-14
2	Name of Work	:	M/O Pump set & E.I. Various Places at Dwarka. SH:- Running, Maintenance & Operation of clear water booster pump sets, submersible pump sets, D.G. Sets & Electrical Installations at command Tank No.-2 at sector-3 and Tubewell No.T-2 & T-3 at Sector-5, Dwarka.
3	Estimated Cost put to tender	:	Rs.15,35,434/-
4	Earnest Money	:	Rs.30,709/-
5	Period of Completion	:	12 months
6	Date of Commencement of e-tender	:	28.05.2013
7	Last date & time of requisition of application of e-tender	:	07.06.2013 3.00 PM
8	Last date of scanning & uploading UTR of RTGS / NEFT against cost of tender, EMD & other documents	:	07.06.2013 3.00 PM
9	Last date & time for submission of certified hard copies of documents mentioned at Serial No 8 to Executive Engineer	:	10.06.2013 3.00 PM
10	Date & time for opening of Pre Qualification documents	:	11.06.2013 12.00 noon
11	Date of Pre-Bid	:	05.06.2013 12.00 noon
12	Last date & time for submission of e-tender (Technical cum commercial & Price bid)	:	07.06.2013 3.00 PM

13	Time & date of Opening of technical bid	:	13.06.2013 3.00 PM
14.	Time & date of opening of financial bid		15.06.2013 3.30 PM

- 1 The intending tenderers shall have experience for successfully completed one similar work of value not less than 80% of the estimated cost put to the tender **OR** two similar works of each of value not less than 60% of the estimated cost put to the tender **or** three similar works of each of value not less than 40 % of the estimated cost put to the tender during last **seven** years ending last of the month previous to the one in which applications are invited.

- 2 The tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen from website www.tenderwizard.com/DDA or www.dda.org.in free of cost.

Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online tendering process as per details available on the website. The intending bidder must have valid class-II digital signature to submit the bid.

- 3 Earnest money and cost of tender shall be deposited through RTGS/NEFT in the account of Sr. A.O. **CAU (Dwarka) DDA** having account no. **1290300366** with **Central Bank Of India, Manglapuri, New Delhi** branch (**IFSC code CBIN0283498**). The unique transaction reference of RTGS/NEFT shall have to be uploaded by the tenderer in the e-tendering system by the prescribed date. The Executive Engineer concerned will get tender cost/earnest money verified from CAU based on the unique transaction reference number against from each RTGS/NEFT payment before the tenders are opened.

A Part of earnest money is acceptance in the form of bank guarantee also. Earnest Money up to Rs. 20.00 lacs will have to be deposited through RTGS/NEFT mode. If the amount of E.M. is more than Rs. 20.00 lacs then the amount of E.M. beyond Rs. 20.00 lacs can be deposited in the form of Bank Guarantee also. Such Bank guarantee is to be scanned and uploaded to the e-tendering website within the period of tender submission.

- Earnest money and cost of tender have to be deposited through separate transactions.
 - i) Cost of Tender Document: **Rs.525/-** (to be deposited through RTGS/NEFT in the account of the Sr. A.O.(CAU) of concerned Zone).
 - ii) E-Tendering Processing Fee: **Rs.863/-** (to be deposited through E-Mode of ITI Limited in favour of M/s ITI Limited payable at Delhi).

The unique transaction reference of RTGS/NEFT against EMD, Cost of Tender Document and Bank Guarantee shall be placed in single sealed envelope superscripted as **“Earnest Money, Cost of Tender Documents”** with name of work and due date of opening of the bid mentioned thereon and will submit to tender opening Authority by 10.06.2013

- 4 Copy of certificate of work experience and other documents as specified in the press notice (as given at Serial No 1 above) shall be scanned and uploaded to the e-tendering website within the period of tender submission and certified copy of each shall also be deposited in a separate envelope marked as **"Other Documents"**.
5. Both the above envelopes shall be placed in another envelope with due mention of Name of work, date & time of opening of tenders and to be submitted in the office of Executive Engineer during the period mentioned above.
- 6 Online tender documents submitted by intending bidders shall be opened only of those bidders, whose proof of submission of Earnest Money Deposit, Cost of Tender Document and e-Tender Processing Fee and other documents placed in one envelope (containing envelopes of **Earnest Money, Cost of Tender Document and Cost of Tender Processing Fee & Eligibility Documents**) have been submitted to EE and are found in order.
- 7(i) The Technical bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.
- 7(ii) Pre Bid conference shall be held in the chamber of **EE/ELD12 AT 12.00 noon on 05.06.2013** to clear the doubt of intending tenderers, if any.
- 8 The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many tenders are received satisfying the laid down criterion.

9 **List of Documents to be scanned and uploaded within the period of tender submission:**

- i) Documents in support of eligibility.
- ii) Certificate of Registration for Sales Tax / VAT and Service Tax

**EXECUTIVE ENGINEER
ELECT. DIV.12/D.D.A.**

No. F. 97(1)A/c/EE/El.D.12/ DDA/12-13

Dated:

Copy to:-

1. The S.E.(E)-I/Elect. CirI.-I/DDA.
2. The E.E.(E)/QCC/DDA
3. Sr. A.O. (CAU)/Dwarka, DDA
4. EE/ED-2,4,5,6,7,8,9,10,11, DDA
5. AE-1,2,3,4 / Electrical Div No. 12, DDA
6. AE(P)/ED-12, DDA
7. The Electrical Engineers Contractor Association, 2362/1, Maharaja Complex, Mina Road, Patel Nagar, N Delhi.
8. The association of Electrical Contractor, Chamber No. 103, Laxmi Nagar, Laxmi Complex, Subhash Chowk, Delhi-110092.
9. The DDA Contractor Welfare Association, Near entrance of barrack No. 1, Vikas Kuteer, I.P Estate, N Delhi.
10. The Delhi Contractor Builder Association, H. No. 5503, New Chandrawal Ch. Bhim Singh Road, Delhi-110007.
11. The CPWD Contractor Association, 'Y' Shape Building, I.P. Estate, New Delhi.
12. The DDA Builder Association, C-29, Panchsheel Enclave, New Delhi.
13. The Contractor Association, 40A, E-18, Vikas Kuteer, I.P. Estate, New Delhi.
14. The DCP, Darya Ganj, New Delhi for information and necessary action.
15. All DDA & MCD Contractor Welfare Association (Regd.) 253, Pratap Khand, Vishwakarma Nagar, Delhi 92.
16. Notice Board, Electrical Division No. 12, DDA
17. Tender Clerk, CAU(Dwk), DDA, New Delhi.
18. Dy. Director (System), DDA, Vikas Sadan with request to check the E-mail at ddatender@dda.org.in
19. Delhi Govt. Contractors Welfare Association (Regd.), 179, Trivani Apartment near Police Station, Vivek Vihar, Delhi 95.
20. AAO/ED-12 ensured to E-mail at ddatender@dda.org.in
21. M/s ITI Limited B-1/5 2nd Floor Janak Puri, near Janak Puri East Metro Station Najaf garh road, N.D-110058 along with hard & soft copy of above NIT documents for further necessary action .Website www.tenderwizard.com/DDA for any assistance on e-tendering please contact M/s. ITI Limited on 011-22488721, 9350596369, 8010637038,9312064776.

**EXECUTIVE ENGINEER
ELECT. DIV.12/D.D.A**



DELHI DEVELOPMENT AUTHORITY

Name of Work: - M/O Pump set & E.I. Various Places at Dwarka.

SH : - Running, Maintenance & Operation of clear water booster pump sets, submersible pump sets, D.G. Sets & Electrical Installations at command Tank No.-2 at sector-3 and Tubewell No.T-2 & T-3 at Sector-5, Dwarka.

SCHEDULE OF QUANTITIES

Estimated Cost:-15,35,434/-

S. No.	Description of Item	Qty	Unit	Rate	Rate in words	Amount
1	Running, operation & maintenance of clear water booster pump sets, submersible pump set, D.G. set and Electrical Installations at command Tank No-2 and Tube well No-T-2 & T-3 as per inventory, annexures, terms and conditions attached.	12.00	Month			
2	Supply and replacement of the following					
	a) HPSV lamp 70 watt.(Tubular)	17.00	Each			
	(b) Copper wound polyester filled ballast 70 watt	10.00	Each			
	(c) Electronic Ignitor suitable for 70 watt. HPSV lamp.	20.00	Each			

	(d) 40 Watt Copper ballast.	10.00	Each			
	(e) Condenser 10 mfd./240 volt.	5.00	Each			
	(f) TP MCB- 32 Amp.	3.00	Each			
	(g) HPMV lamp 125 watt.	2.00	Each			
	(h) Copper wound polyester filled ballast for 125 watt HPMV lamp.	2.00	Each			
3	Lifting of submersible pump set along with G.I. pipes and accessories i/c dismantling of pump set from delivery line etc complete as required.	5.00	Job			
4	Lowering of submersible pump set in the bore well with G.I. pipes i/c connections of delivery line with accessories, valves etc. cable jointing, connections, testing etc complete as required.	5.00	Job			
5	Supplying of following size of XLPE insulated/PVC Sheathed 1.1 KV Grade Al. cond. Armoured power cable including testing etc. as required.					
	a) 2 x 16 sq.mm.	200.00	Mtr.			
	b) 4 x 25 sq. mm.	100.00	Mtr.			

6	Laying of one No PVC insulated and PVC sheathed/XLPE power cable of 1.1 KV grade of size not exceeding 25 sq. mm direct in ground i/c excavation, sand cushioning, protective covering and refilling the trench etc. as reqd.	300.00	Mtr.		
	Total:-				
	Say:-				

INVENTORY AT TUBEWELL T-2 & T-3

PART – A

1. Submersible Pump set:-

- | | |
|---|-----------|
| a) 3 H.P. 4 stage B.S. Make Submersible pump sets
lowered in bore with G.I. Pipe | -- 2 Sets |
| b) Control panel board with all necessary accessories | -- 2 Sets |
| c) Details of valves – Sluice valves and N.R.V.S. | -- 6 Nos. |

PART – B

1. D.G. Set:-

- | | |
|--|----------|
| a) Capacity – 10 KVA air cooled with acoustic enclosure complete with Control
Panel comprising accessories. | -- 1 set |
|--|----------|

PART – C

Internal Electrical Installation

- | | |
|------------------|------------|
| a) Light Points | -- 10 Nos. |
| b) Power points | -- 2 Nos. |
| c) Batten Holder | -- 4 Nos. |
| d) Ceiling fan | -- 1 No. |

PART – D : STREET LIGHT

External Electrical Installation:

- | | |
|--|------------|
| a) 125 watt. H.P.M.V. fitting complete | -- 5 Nos. |
| b) Earthing Sets | -- 6 Sets. |

**EXECUTIVE ENGINEER
ELECT. DIV.12/D.D.A.**

TERMS & CONDITIONS:

Name of Work: - M/O pump set & E.I. Various Places at Dwarka.

SH: - Running, Maintenance & Operation of clear water booster pump sets, submersible pump sets, D.G. Sets & Electrical Installations at command Tank No.-2 at sector-3 and Tubewell No.T-2 & T-3 at Sector-5, Dwarka.

FOR OPERATION & MAINTENANCE OF PUMP SETS AND D.G. SETS: -

1. The work comprises of running, operation & maintenance i/c watch & ward of pump sets and its allied accessories, D.G. set, Sub-station equipments, vacuum Pump sets, dewatering pump sets, mechanical bar screen and general lighting as per the inventory and schedule of maintenance attached.
2. The contractor shall depute the following staff under the contract:-
 - a) Technical Supervisor / Forman : 9:00 A.M. to 5:00 P.M - 1 No.(once in a week)
 - b) Pump Operator Gr.I-(5 Nos.) as per following shifts:

2 Nos from 6:00 AM to 2:00 PM for Command Tank-2

2 Nos. from 2:00 PM to 10:00 PM for Command Tank-2

1 No from 10:00 P.M. to 6:00 A.M. for Command Tank-2 .
 - c) Pump operator Gr-II.- 1 No. from 9.00 A. M. to 6.00 P.M. is general shift for Tubewell No. T-2 & T-3
 - d) Khallasi / Chowkidar (4 Nos.) as per following shifts: :

1 No. from 6:00 AM to 2:00 PM for Command Tank-2

1 No. from 2:00 PM to 10:00 PM for Command Tank-2

2 Nos. from 10:00 P.M. to 6:00 A.M (1No.for Command Tank-2 & 1 No. for Tube well No.T-2 & T-3)
 - e) Safai Karamchari -- 1 No. from 9:00 A.M. to 5:00 P.M (in general shift for both the sites.)
3. The contractor shall employ trained and competent operators staff to the satisfaction of Engineer-in Charge having two years experience of operation of pump sets/D.G. Sets and sub-station equipments.
4. The contractor shall supply the list of staff to be engaged on the installation along with their experience certificates, within 7 days of award of work. Engineer-in-Charge shall have the right to reject any staff employed by the contractor.
5. The staff employed by the contractor shall wear proper uniform and wear badges displaying their name and designation. The staff shall also be given photo identity cards by the contractor displaying their name, father's name, address, date of birth, name of the agency with address, telephone no., site for which employed and period of validity. A copy of the identity card shall be given to the Engineer-in-Charge within 15 days of award of work.
6. The contractor shall employ staff throughout the period of contract including Saturdays, Sundays, Gazette holidays and National holidays.
7. The pump operator should be conversant with operation of HT / MV and LT switch gears, LT motors, liquid rotor starter and 625 KVA D.G. Sets, transformers capacitor bank, heavy duty sluice valves, water level indicator, sump pump non-return valves etc. as required at site of work.
8. Foreman / Technical supervisor shall guide operational staff and also keep in touch with the

department Engineer for various instructions. In case of any emergency / requirement of work, he shall attend the pumping station in evening / night hours also. The staff shall be available at pump house during specified timings and regular operation of pump set and watch and ward.

9. Following records are to be kept at site of work.

- a) Printed log book for recoding operation of pump set / D.G. set & sub-station equipment.
- b) Attendance register for staff employed.
- c) Complaint/Inspection register.

Note: The contractor shall get the registers authenticated from Engineer-in-Charge before use at site.

10. Preventive maintenance for D.G. set & sub-station equipment, HT and LT panels as per CPWD schedule for maintenance / Annexure – I & II shall be carried out by the contractor. The details of work carried out shall be recorded in the log book. In addition to above the following minor maintenance shall also be carried out:-

- (a) Servicing and greasing of pumps / motors.
- (b) Replacement of rubber packing of valves and worn out nuts and bolts etc.
- (c) Replacement of Gland Dori as and when required.
- (d) Replacement of HRC fuses, kit kat & indicating lamp as and when required.
- (e) Replacement of incandescent bulb / fluorescent tube / starter in all the pump house and compound lighting.
- (f) Adjustment & alignment of pump set, tightening of nuts and bolts as and when required.
- (g) Replacement of burnt out thimbles, wire terminals etc.
- (h) Top up battery water & coolant of D.G. set.
- (i) Daily cleaning of equipments/pump house.
- (j) Testing of earth resistance of Elect. Panel motor & starter of the pump house.

Note: The material required for carrying out above jobs shall be supplied by the contractor within quoted rates.

11. The D.G. Set shall be operated in case of electricity failure or as and when desired by the Engineer-in-Charge. However P.O.L. shall be supplied by the department for operation & servicing of D.G. set.

12. The maintenance of Internal Elect. Installation i/c Compound Lighting shall be carried out within the quoted rates. Material will be supplied by the department.

13. Co-ordination and follow up action with electric supply agency shall be done by the contractor in case of failure/fault in supply/fluctuation in voltage.

14. The contractor shall intimate the Engineer-in-Charge about the major break down or failure of electric supply in time.

15. Watch and ward shall be the responsibility of the contractor. Any loss due to theft or pilferage etc. shall be borne by the contractor.

16. The payment to the contractor shall be made bi-monthly or other suitable intervals desired by the contractor but not less than two calendar month on the submission of the bill by the contractor.

17. Proper handing over / Taking over of all the E&M installations shall be carried out by JE(E) in charge of the work and the contractor, in writing immediately after award of work/before start of work.

18. The Engineer-in-Charge, if so desire can terminate the contract at any time after giving 15 days notice.
19. If any staff employed by the contractor is found absent on a particular time and date, an amount at the rate of min. fair wage applicable per shift shall be recovered from the contractor's bill for the respective staff.
20. All allied accessories/installations/measuring instruments/ relays etc. shall be kept in working order and in case any damages/loss are done to the pumping installations due to the negligence of the operational staff deployed by the contractor, the contractor shall have to make good the damage/loss within reasonable time, the same shall be got rectified/replaced by the department at the risk and cost of the contractor.
21. The contractor shall keep all the necessary spares and T&P at site required for operation and maintenance to be carried out under his contract.
22. In case of any disobedience or misbehavior by the operational staff of the contractor, the Engineer-in-Charge may ask the contractor to dispense with the services of such staff with immediate effect. The contractor shall provide suitable substitute simultaneously.
23. The rates quoted by the contractor shall be inclusive of all taxes, duties and Govt. levies etc.
24. Any injury to the operational staff, in case of any mishap, during duty hours will be the liability of contractor.
25. All the tests shall be carried out as stated in the schedule of maintenance as per directions of Engineer-in-charge. The tests shall be carried out in the presence of Engineer-in-charge or his representative and test results shall be submitted in duplicate.
26. All the firefighting equipment i/c buckets provided shall be maintained properly. However refilling / recharging of fire extinguishers shall be done by the department.
27. The following makes of the materials are acceptable:

a) HPSV Lamp	Bajaj/Phillips /Crompton/Surya
b) Ballast HPSV 70 watt	Bajaj/Phillips /Crompton/Surya
c) Igniter	Bajaj/Phillips/Crompton/Surya
d) Fl. Tube/Ballast	Bajaj/Phillips /Crompton/Surya
e) Condenser	Bajaj/Apcos/Crompton
f) XLPE insulated copper Conductor Power cable	Asian Cable / Unistar / Ecko / Skytone /Havells
g) MCB	Standard / L&T / MDS/Indokopp

Name of work:- M/O Pump set and E.I. at various places in Dwarka.

SH :- Running, Maintenance & Operation of clear water booster pump sets, submersible pump sets, D.G. Sets & Electrical Installations at command Tank No.-2 at sector-3 and Tubewell No.T-2 & T-3 at Sector-5, Dwarka.

INVENTORY OF COMMAND TANK – 2, SECTOR-3, DWARKA.

S. No.	Description	Qty.
01	125 KW, 415 volts booster pump set	3 Sets
02	285 KW, 3.3 KV booster pump set	3 Sets
03	Liquid rotor resistance starter suitable for 125 KW, booster pump set.	3 Sets
04	Liquid rotor resistance starter suitable for 285 KW, 3.3 KV booster pump set	3 Sets
05	500 KVA Transformer 11 KV / 415 Volts	2 Nos.
06	1000 KVA Transformer 11 KV / 3.3 KV	2 Nos.
07	500 KVA Transformer 415 Volts / 3.3 KV	1 No.
08	11 KV, 7 Panel board with VCP, VCB relays measuring Instruments, PTs etc.	1 Set
09	3.3 KV, 9 Panel board with VCP, VCB relays measuring Instruments, PTs etc.	1 Set
10	APFC Panel, 3.3 KV with APFC relay, Isolator, capacitors etc.	2 Sets
11	APFC Panel, 415 V with MCCB's, measuring Instruments, relay, capacitors bank etc.	2 Sets
12	LT Panel, 415 V with MCCB's, ACBs, motor protection relays, measuring Instruments etc.	1 Set
13	2 HP dewatering pump set	2 Nos.
14	3 HP dewatering pump set	1 No.
15	Auxiliary panel board 415 V with switch, DOL, starters etc.	1 No.
16	75 HP centrifugal pump set	1 No.
17	100 HP centrifugal pump set	1 No.
18	Oil immersed starter suitable for pump set at S. No. 16 & 17	1 No.
19	5 HP vacuum pump for priming of pump set at S. No. 16 & 17	1 No.
20	LT Panel board at Temp. pump house with measuring Instruments etc.	1 Set
21	Sub. Pump set (of capacity from 2 HP up to 5 HP) for filling of water tanker / UGR etc.	8 Nos.
22	C.I. sluice of sizes from 150 mm to 1000 mm dia.	19 Nos.
23	C.I. non-return valve 150 mm to 7000 mm dia.	9 Nos.

24	D.G. Set 625 KVA capacity complete with control panel with ACB, relays, batteries etc.	1 Set
25	D.G. Set 15 KVA capacity complete with control panel & batteries	1 Set
26	Water level indicator (Electronic) with alarm system.	1 No.
27	5 Ton. HOT crane with trolley / girder	1 Set
28	Internal Electrical Installations (a) Ceiling Fan (b) Exhaust Fan (c) FL. Tube light fitting 40 watt.	6 Nos. 11 Nos. 48 Nos.
29	External Electrical Installations (d) 70 watt HPSV lamp fitting fixed on street light pole / bracket (e) 70 watt wall mounted light fitting	70 Nos. 4 Nos.

ANNEXURE-I
ELECTRICAL DIVISION No.-12
SCHEDULE OF MAINTENANCE

S. No.	Description of item	Monthly	Quarterly	Yearly
01	Checking of grease in pump and motors (to be replaced if required)	Yes	---	---
02	Checking of motor terminal boxes (connection to be tightened)	Yes	---	---
03	Checking of gland packing in pump (to be tightened / replaced, if required)	Yes	---	---
04	Checking of foundation bolts / alignment of pump set	Yes	---	---
05	Blowing of dust from inside the motor (with blower)	---	Yes	---
06	Checking of carbon brushes of motors (to be set right, if required)	---	Yes	---
07	Earth resistance and insulation resistance of motors	---	Yes	---
08	Painting of complete installations of pump house	---	---	Yes
09	Checking of play in bearing of pumps, motors by opening	---	---	Yes
10	Checking the play between shafts and rotating parts of pump motor sets.	---	---	Yes
11	Checking of water level in the liquid rotor resistance starter	Yes	---	---
12	Checking of cable connections, contacts in the I.R.S.	Yes	---	---

ANNEXURE-II

SCHEDULE OF MAINTENANCE FOR H.T. PANEL

S. No.	Description of item	Fortnightly	Monthly	Quarterly
01	Checking of fuses	Yes	---	---
02	Checking of VCB changer / tightening of the connection / cleaning of bus bar chamber and checking of bushing, checking of breaker and operating mechanism.	---	---	Yes
03	Checking of all activity / earth connection, checking of insulating contractors and other current conveying parts.	---	---	Yes
04	Checking of batteries and battery charger	Yes	---	---