

**IITM HOSTEL MANAGEMENT
TRUST, CHENNAI-600 036**

TENDER NOTICE

Managing Trustee, IITM Hostel Management Trust, IIT Madras Campus, Chennai 600 036 invites tender from the **manufacturing firms** for operation & comprehensive annual maintenance of two RO Plants of 3000 LPH capacity in the IIT Madras Hostel Zone.

For more details visit:
<https://ccw.iitm.ac.in/>.

Last date & Time of Submission:
09.11.2018 & 3.00 pm.

**IITM HOSTEL MANAGEMENT TRUST
INDIAN INSTITUTE OF TECHNOLOGY MADRAS, CHENNAI 600036**

INVITATION FOR TENDER

Ref: IITM HMT/RO/02/2018-19

Date: 16.10.2018

MANAGING TRUSTEE, IITM Hostel Management Trust invites Non-Transferable Tender in two envelope system (Application for eligibility and financial bid) from the **manufacturing firms** for Operation & Comprehensive Annual Maintenance of two RO Plants of 3000 LPH capacity in the Hostel Zone for a period of one year from date of agreement with provision for further renewal of one year capped at a maximum of three years on mutual consent of the parties.

1. Particulars of Work:

Name of the work	Operation and Comprehensive Annual Maintenance of two RO plants of 3000 LPH capacity located in the Hostel Zone.
Earnest Money Deposit	2% of the quoted amount
Time period for completion	12 months
Validity of the tender	90 days from the date of opening of tender.
Cost of the tender	Rs.5000/-

2. Chronology of Events:

Sl. No.	Key Event	Date & Time
1.	Pre-Bid Meeting	November 2, 2018 (Friday)
2.	Last date for submission of tender	November 9, 2018 by 3.00 PM
3.	Date of opening of Eligibility Document	November 9, 2018 at 4.00 PM
4.	Date of opening of Financial bid	To be notified later to eligible firms.

- a) In such situations, where any of the above mentioned dates are declared holiday, the events will be taken up on the next working day at the same time. However, the last date of submission of bids will remain unchanged.

- b) The Tender document can be obtained in person/by post from the, Office of Hostel Management, IIT Madras Campus, Chennai 600036, on production of the request letter along with a Demand Draft for Rs.5000/- drawn in favour of the "Chairman (Council of Wardens)" on behalf of IITM hostel management Trust (hereinafter referred as 'Trust') payable at Chennai. Tender fee is non-refundable.
- c) Sealed bids are to be deposited in the tender box placed at the reception area (open on all days between 9 am to 5.30 pm) and should be addressed to the Managing Trustee, IITM Hostel Management Trust, IIT Madras, Chennai – 600 036.

OR

The tender shall be sent through post addressed to The Managing Trustee, IITM Hostel Management Trust, IIT Madras, Chennai – 600036. The bidder shall be solely responsible for postal delay, if any.

- d) Bidders are requested to frequently visit our website <https://ccw.iitm.ac.in/> to check any further information about the tender. In case of any clarifications regarding bid, the same may be raised during scheduled pre-bid meeting as mentioned above. Bidders shall not be permitted to alter or modify the tender after last date of submission of tender. Bidders are also advised to visit RO plants at their cost and examine it and its surroundings and collect all the information they consider necessary for proper assessment of prospective assignment on any working day between 9 AM to 5.30 PM.

3. Venue: Conference Hall, OHM, IIT Madras, Chennai – 600036

4. Eligibility Criteria:

The firm should have at least 2 successful AMC completion certificates of AMC of RO plant of 3000 LPH capacity in preceding 5 years ending 31.3.2018 from any Central/ State Government/ Autonomous body/ PSU/Reputed private firms. Any single work order shall not be less than Rs. 5 lakhs. The completion certificates duly signed by the authorized signatories of the organizations/departments/firms should contain the details like Name of work, Agreement No. & date, date of commencement, date of completion, value of work, performance rating.

5. Scope of Work:

I. Preventive Maintenance

- a. To conduct on site physical and chemical testing for raw water, treated water and also check the flow rates.
- b. To check all electrical circuits and parts.
- c. To check all the mechanical parts.

- d. To check the pumps and motors including electrical warranty.
- e. To check the valves and pipelines.
- f. To check the electronic meters and circuits.
- g. To check the pressure gauges and pressure switches.
- h. To wash the micron filters.
- i. To check the back wash and regeneration operations.
- j. Physical inspection for system and related things like dosing systems, RO plant.
- k. Observation of pressure at all units inlet/outlet and system pressure.
- l. Observation of each flow rate and compare with design.
- m. Observation of dosage of Antiscalent.
- n. Calculation of recovery and compare with design.
- o. Inspection of plant performance data/log sheet analysis.
- p. Inspection of consumables.
- q. Change of micron filters monthly once.
- r. Cleaning of the RO plant and housekeeping related to the plant area at no additional cost to IITM Hostel Management Trust.

II. Service

- a. Servicing Pressure Sand Filter (PSF)/Activated Carbon Filter (ACF) through periodical backwashing and change the filter media as and when required.
- b. Check the RO plant recovery and give the permeate flushing to RO system.
- c. Probing activities for each membrane.
- d. Profiling activities for each pressure tube.
- e. Selection of cleaner according to plant performance and cleaning of membranes periodically.
- f. Alignment, lubrication, tensioning of all drivers and rotating parts as required from time to time of all mechanical parts.
- g. Dismantling and assembling of mechanical parts as required.
- h. Check and tighten the end terminations of electrical items.
- i. Check IR value and continuity of all the electrical items.
- j. Check for the tightness of electrical terminals.
- k. Check the zero error of the pointer and take corrective action in all electrical equipments/parts.
- l. Service Engineer shall undertake 12 mandatory visits (once a month) to both the RO plants.

III. General

- a. Provide manpower for operation of 2 RO plants of 3000 LPH capacity throughout the year and produce the RO product water as per the prescribed standard. The selected bidder shall depute dedicated employee for operations and maintenance to be stationed at the two RO plants during working hours.
- b. Operation of RO plants, maintenance activities, monitoring and effective operation and management of all facilities related to the existing plants.

- c. Supply of all consumables and spares including pumps and accessories, electrical equipments and electrical accessories at no additional cost to the Trust.
- d. The Comprehensive Annual Maintenance Contract is for preventive as well as breakdown maintenance and includes running/major repairs and replacement of all parts including (but not limited to) the filter membranes of the RO system with no additional cost during the contract period to ensure water quality from RO within the acceptable limit of drinking water fit for human consumption, while ensuring the optimum output from the RO Plants.
- e. To submit the plant log sheet on daily basis and maintain a complaint book at each of the RO Plants. The complaint book shall contain the type of complaint, date and time of registration of complaint and date and time of rectification of complaint under the signature of Service Engineer. The operator shall get the complaint countersigned by a representative from the Trust both at the time of Registration and Rectification of the complaint.
- f. Operations and Maintenance Incharge should visit every month and give his recommendations and suggestions in writing to the operating staff and mark a copy to the Managing Trustee.
- g. A monthly consolidated report on functioning of RO plant to be submitted to Trust.
- h. Provide uniform, shoes and safety items to the operators and ensure that they have an Identity Card on their person throughout the working hours.
- i. Shall periodically check/calibrate the various instruments and ensure their proper functioning.
- j. Shall periodically check equipment, lubrication, adjustments etc., to ensure proper performance of RO plants.
- k. Arrange for compressed air, steam when required for operation of the plant.
- l. Shall ensure security and insurance of chemicals and spares pertaining to the RO plants.
- m. Minor or major break down should be resolved within 24 hrs. Replacement of broken or damaged parts should be carried out at no additional cost to the Trust. The repair and servicing etc., shall be carried out in the premises of Trust. Only such work as cannot be done in the premises of Trust will be allowed to be done outside with the written permission of Managing Trustee, IITM Hostel Management Trust and for this purpose no extra payment will be made.
- n. Service Engineer shall visit the plants within 24 hrs., of raising complaint at no additional cost to the Trust and this would be in addition to the 12 mandatory visits under the agreement.
- o. Shall arrange for tools-tackles and labour for any cleaning or overhauling activities.
- p. Shall carry out maintenance of RO plants without hampering continuous supply of treated water.
- q. All services related to operation and maintenance of the two RO plants.
- r. Any other oral/written instructions related to operation and maintenance of the RO plants issued by the Managing Trustee.

- s. The bid/offer should be comprehensive 100% inclusive of all parts.
- t. The parameters shall meet the corresponding permissible limit tabulated below during water sample analysis of the treated water at any point in time by in house laboratory.

S.No.	Parameters	Units	Permissible limit
1.	pH		6.5 to 8.5
2.	TDS	mg/L	500
3.	Conductivity	ms/μs	500
4.	Alkalinity	mg/L	200
5.	Hardness	mg/L	300
6.	Turbidity	NTU	5
7.	Sulphate	mg/L	200
8.	Nitrate	mg/L	45
9.	Chloride	mg/L	250
10.	Fluoride	mg/L	1.0
11.	Iron	mg/L	0.3
12.	Fecal Coliform	MPN/100ml	<1.8
13.	Total Coliform	MPN/100ml	<1.8

Terms and conditions:

1. Conditional acceptance of tender shall be rejected straightaway.
2. Any communication from IITM Hostel Management Trust in connection with the tender shall be treated as valid only if it is in writing and published on its website.
3. The financial bids of the eligible bidders would be opened and the lowest bidder (L1) shall be eligible for the award of tender. If during the contract period, L1 party does not fulfil the contractual obligations and its contract is terminated or party withdraws expresses inability to work further, IITM Hostel Management Trust reserves the right to select L2 and subsequently L3 etc..., to execute the work as per the rates quoted against this tender.
4. In such cases where a bidder after award of work order refuses to accept the work, its EMD shall be forfeited and the firm may be blacklisted for a period of 3 years from submitting any bid to IITM Hostel Management Trust.
5. The quotations should be accompanied by a valid Demand Draft for EMD amount in favour of Chairman (Council of Wardens) payable at Chennai, without which the tender shall not be accepted. The Trust may deposit the EMD amount in its bank account and in such case refund of EMD amount to unsuccessful bidders will be generally done within 30 days from opening of the financial bid, however in case of any delay no interest shall be payable on this amount by the Trust. The EMD of successful bidder would constitute security deposit refundable on completion of the contract.
6. All bids should be duly sealed/taped clearly marking the bidder's name and address on top of the sealed envelopes. Envelope-1 containing the eligibility application will be opened on the date of opening of tender. Envelope-2 containing the EMD and FINANCIAL BID in the format provided at Annexure-I of only those tenderers who qualify as per the eligibility criteria, will be opened on a date which will be intimated later but not later than 30 days from the date of opening of tender. Both these envelopes should be placed inside a third envelope on top of which Name of the firm and contact details should be written along with heading as BID FOR OPERATION AND COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT FOR RO PLANTS. Tender documents without valid EMD shall be summarily rejected.
7. Incomplete and unsigned bids are liable to be rejected. The original tender document must be duly signed and stamped by authorized signatory on each page. Alteration in the tender if any should be attested by the authorized signatory properly, failing which the tender is liable to be rejected.

8. The price quoted by bidder shall be net per unit as shown in the schedule (Annexure -I) and inclusive of all taxes and other charges like handling charges, loading/ unloading charges, Cartages etc., for delivery at the location of RO Plants. PF, gratuity, other statutory payments and wages etc., to the employees of the firm deputed under the contract will be responsibility of the firm and the Trust shall not be liable for payment of any other charges (like inspection charges etc.), except the consolidated payment towards Operation and Comprehensive Annual Maintenance Contract. The rate must be quoted both in words and figures. If there is discrepancy between the price quoted in words and figures, the price quoted in words shall be treated as final.
9. The price once accepted by Trust shall remain valid during the entire contract period. The payment shall be released on monthly basis against the bill provided by the firm on due certification of satisfactory services by officer in-charge in the Trust. Payment shall ordinarily be made within 7 days of receipt of the pre-receipted bill (in duplicate). Tax shall be deducted at source from the amount payable to contractor against the bill raised, as per the existing rules and regulations. Final payment shall be released only on handing over the RO Plants in working condition.
10. The contractor shall ensure that no damage is caused to the equipment/Govt./Trust building in the performance of the services. Any loss suffered on this account shall be quantified by the Engineering Unit of IIT Madras and recovered from the contractor's bill.
11. Managing Trustee reserves the right to accept or reject any bid in part or full or all bids and to annul the tendering process at any stage without assigning reason thereof and without incurring any liability to the affected Bidder or Bidders. In case of any dispute matter will be resolved by Arbitrator appointed by the Managing Trustee and decision of the arbitrator will be final and conclusive. The successful bidder shall sign an agreement and the tender documents alongwith enclosures will also form part of the agreement.
12. Managing Trustee may at his discretion, extend the deadline for submission of bids through the issuance of addendum/ corrigendum on its website <https://ccw.iitm.ac.in/> in which case all rights and obligations of the bidders previously subject to the deadlines shall thereafter be subject to the new deadline as extended.
13. Upon receipt of notification of award of work through email/post, the successful bidder shall sign the agreement within 10 working days.
14. The service provider shall provide/attach a service associate for the job of Comprehensive Annual Maintenance Contract (CAMC) mentioned in scope of

work, who shall be approachable over phone between 8 am to 6 pm on all days during CAMC in the format at Annexure-II. The Service Engineer shall attend to any complaint including on holidays, within 24 hours of registration of complaint over email. Non-compliance may lead to penalty in the form of deduction from payment as mentioned below:

- a. Attending to complaint beyond 24 hours and within 48 hours of intimation – Rs. 500/-
- b. Attending to complaint beyond 2 days – Rs. 1000/- per day.

15. Managing Trustee reserves the right to engage a third party to rectify any defect minor or major and recover the charges paid from the monthly payment due and payable, if the complaint is not attended within 2 days. Further, not attending of complaints within 2 days on 3 occasions would entail termination of contract.

16. The Operators stationed at the RO plants shall obtain necessary vehicle pass from the Institute Security Section if any, powered vehicles are used.

17. The Operators or Service Engineer or any other representative from the contracting firm shall not undertake any other work inside the IIT Madras Campus without approval of Managing Trustee of the Trust.

18. The contracting firm shall comply with all the Rules and Regulations of IIT Madras and also the oral/written instructions issued by the Managing Trustee from time to time.

19. The following graded penalty clause would be invoked against the contracting firm for non-compliance of scope of work and violation of other terms and conditions under the agreement, if penalty/fine is not specified elsewhere in the agreement for the said violation/non-compliance.

- Warning for first violation/non-compliance, 10% of the bill amount for the month, for second violation.
- 40% of the bill amount for the month, for third violation/non-compliance.
- 80% of the bill amount for the month, for fourth violation/non-compliance.
- Termination of contract, if three violation/non-compliance(s) are reported in a month.

20. Any dispute under the agreement shall be settled by an arbitrator to be nominated by the Managing Trustee of IITM Hostel Management Trust. The contract shall be subject to Indian Laws under the jurisdiction of Courts of Chennai.

21. The contracting firm shall not violate the waste disposal rules of the Institute.

22. The employees of the contracting firm shall not indulge in use or distribution of banned substances inside the campus.

23. Smoking, consumption/distribution of alcohol, use of *pan* and *gutkha* is strictly prohibited inside the IIT Madras campus. The employees of the contracting firm shall abide by this regulation.
24. Employees of the contracting firm shall not indulge in any kind of misbehaviour with residents of hostel zone and other inmates of the campus. Further, shall not indulge in quarrels, fights and use any kind of lethal weapons or any objects to inflict injuries, inside the campus.
25. Employees of the contracting firm shall not involve in unauthorized removal or theft of things/items from inside the IIT Madras Campus.
26. Employees of the contracting firm shall not remain in the IIT Madras Campus beyond working hours without prior intimation to the Managing Trustee.
27. Harming flora and fauna in the campus or feeding animals inside the campus is prohibited and any violation on this count shall entail termination of the contract.
28. The contracting firm is solely responsible for payment of minimum wages, ESI and EPF for their employees as per the Government of Tamilnadu and Government of India norms, if applicable and should meet any other statutory and non-statutory benefits/obligations. The record of duty hours and pay structure should be maintained as per rules, for inspection by the government authorities. Non-compliance of any statutory/non-statutory provisions would entail termination of contract.
29. The contracting firm should not have been blacklisted by the Department/Ministries of the Central/ State Govt., autonomous body under state/ Central Govt., State/Central PSUs. /reputed organization.
30. During the entire period of contract no request for any increase in the rates on any account would be entertained and the performance would be reviewed from time to time to ensure that it is up to the entire satisfaction of Managing Trustee, IITM Hostel Management Trust.
31. While submitting bids for the work, the bidder shall be deemed to have read, understood and accepted all the terms and conditions stated in the enquiry of this work.
32. The contract will be awarded on "as is where is basis". However, the bidders may inspect the machines and satisfy themselves, if they desire to do so on any working day before closing of date of submission of tender with prior permission

of Managing Trustee, IITM Hostel Management Trust. It may be noted that no charges for such inspection shall be payable to the bidder by the Trust.

33. All pages of tender document and corrigendum shall be signed by the authorized signatory of the tender as acceptance of Terms & Conditions of the tender and corrigendum and the document should be firmly bound.

34. The successful bidder shall sign an agreement on non-judicial stamp paper for Rs. 100/- at the time of award of contract.