



thsti

ट्रांसलेशनल स्वास्थ्य विज्ञान
एवं प्रौद्योगिकी संस्थान

TRANSLATIONAL HEALTH SCIENCE
AND TECHNOLOGY INSTITUTE

(An autonomous Institute of Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India)
Bioscience cluster 3rd mile stone Faridabad Gurgaon Expressway Faridabad

PHONE No. : 0129-2876426 FAX: 0129-2876 402 Web Site: www.thsti.res.in

E - TENDER DOCUMENT

(Two Bid system)

FOR

**Expansion and Modification of the Existing Sewerage Treatment Plant at
NCR Biotech Science Cluster Faridabad.**

(Tender No.: THS/Civil/NIT/25-26/04)



INDEX

S.No	Description	Page No.
1	Part – A	4 – 17
2	Tender notice	4
3	Pre-Qualification Criteria	5
4	Registration Process	6
5	Tender Documents Search	6
6	Bid Preparation	6 – 7
7	Bid Submission	7
8	Assistance to Bidders	8
9	Bid Evaluation Criteria	9-10
10	Instruction to the bidders	11
11	Financial Bid	12-13
12	Authorization Letter	14
13	Schedule – A :Tender acceptance Letter	15
14	False Clause Declaration	16
15	Non-Black Listing Declaration	17
16	Part – B	
17	Condition of contract and technical specification	18-19
18	Stages of payments	20
19	Time for Completion of Work	21
20	Time and Extension for Delay	21
21	Compensation for Delay	21
22	Technical Specifications and Standards	22
23	Inspection , Testing and Quality control	22
24	Packing and Marking	22
25	Water and Power for Fabrication	22
26	Co-ordination	22
27	Clearance of Site	22
28	Compliance with Labour Laws and other Laws.	23
29	Safety code, Labour Camps Sanitary Arrangements	24

30	Payment of Wages by the Contractor	24
31	Removal of Person	24
32	Watch and Ward	24
33	Guarantee Clause	24
34	Price Fall clause	25
35	Other Conditions to be Adhere by the Tenderer	25
36	Interpretation	25
37	Termination	26
38	Force Majeure	26
39	Arbitration	26
40	Annexure – I: Application Form	27-28
41	Annexure – II: General Information	29
42	Annexure – III: Financial Capability	20
43	Annexure – IV: Work experience	31
44	Annexure – V: Litigation Details	32
45	Annexure – VI: Certificate for Site Inspection	33
46	Annexure – VII: Form of Agreement	34-35
47	Annexure – VIII: Schedule of Contract	36
	PART-C	
48	Scope of the work	36 – 38
49	Schedule of Approved make	49-50
50	Checklist for Submission of Technical Proposal and Compliance	51
51	Annexure – IX: Performa for price bid	53
52	Annexure – X: Tender Drawing	54-55

NOTICE INVITING e-TENDER AND PRE-QUALIFICATION CRITERIA

IF THERE IS DIFFERENCE IN ANY INFORMATION/DATA MENTIONED IN THE TENDER DOCUMENT AND UPLOADED IN CPP PORTAL, THE INFORMATION/DATA UPLOADED IN CPP PORTAL SHOULD BE TREATED AS FINAL

Tender No.:THS/Civil/NIT/25-26/04

Date: 12.09.2025

1.0 e-TENDER NOTICE

Online tenders are invited on behalf of the Executive Director, THSTI under Two-Bid System (Technical bid and financial bid) from reputed Contractors / Agencies for the work: **“Expansion and Modification of the Existing Sewerage Treatment Plant at NCR BSC Faridabad”** on EPC mode as per schedule, specifications and the terms and conditions mentioned in the tender document. Off-line / physical bids shall not be accepted and no request will be entertained on any ground/reason.

NOTICE INVITING e-TENDER

Website Url :	www.thsti.res.in https://eprocure.gov.in
Address:	Translational Health Science Technology Institute, NCR Biotech Science Cluster, 3 rd Milestone, Faridabad-Gurugram Expressway, Faridabad - 121001, Haryana
Contact Details	Sr.Technical Officer (Civil), THSTI, Faridabad Phone: 0129-2876426, 2876424
Name of Work	Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad.
Estimated Cost of Tender	Rs. 78,30,340/-
Earnest Money	Rs. 1,60,000/- needs to be deposited online through e- tender portal. For more information, please refer point no.-17 & 18 of “Instructions to the Bidder”.
Tender Processing fees	Rs. 1,180/- to be deposited online through e-tender portal.
Tender Uploading Date & Time	13-09-2025; 6:00 P.M.
Tender Closing Date & Time	07-10-2025; 12:00 P.M.
Date of Pre-Bid Meeting	NA
Date of Opening of Technical bid	08-10-2025; 12:30 A.M.
Date of Technical Presentation	Will be intimated separately
Date of Opening of Financial bid	Will be intimated separately on CPP Portal and THSTI website.

MANUAL BIDS SHALL NOT BE ACCEPTED, Except for the original documents / instruments as mentioned in this tender. Bidders should regularly visit the website to keep themselves updated.

2.0 PRE QUALIFICATION CRITERIA

- I. The tenderer must be a Goods Service Tax (GST) registered firm / company. Tenderer must be a Manufacturer or Contractor. (Sub-authorization /Joint-venture / partnership shall not be accepted).
- II. The Bidder shall have satisfactorily completed the works as mentioned below during the last **SEVEN YEARS** ending previous day of last date of submission of tender.

Three similar completed works costing not less than the amount equal to **40%** of the estimated cost.
or

Two similar completed works costing not less than the amount equal to **60%** of the estimated cost.
or

One similar completed work costing not less than the amount equal to **80%** of the estimated cost.

- III. **“Similar Works”** shall mean successful completion of work of Bidder should have successfully completed job of Sewage Treatment Plant (STP) based on Moving Bed Bio Reactor (MBBR)/ Sequential Batch Reactor (SBR)/Fluidized Media Reactor (FMR)/ Activated Sludge Process (ASP) Technology or any other water or wastewater treatment related works such as RO plants, Ultra Filtration System, WTP, ETP in any other Govt. Departments / Autonomous Institutes, PSU's, universities, Biotech companies, Research institutions & pharmaceutical laboratories or reputed private sector laboratories during last seven years. Self-attested copies of the completion certificates issued by the Executive Engineer/Head of department/ owner are required to be uploaded with the technical bid. In case of issue of completion certificate by private sector the agency has to submit TDS certificate along with the completion certificate in evidence of the value of work done. The tenderer shall also give complete details of the concerned authority such as name with designation, valid address, telephone/ mobile number with STD Code, etc. The completed works will be open to inspection and in case works is not up to the standard, the tender will summarily be rejected & no queries will be entertained in this regard. **Refer “Annexure-IV”**.
- IV. Average annual financial turnover should not be less than the amount equal to 50% of the estimated cost put to tender during the immediate last three consecutive financial years. The tenderer shall attach copy of audited/ITCC Certificate for the last three years duly attested by Chartered Accountant. The tenderer should submit balance sheet and Profit & loss account duly attested by chartered accountant for the preceding three financial years.
- V. The bidder shall have solvency certificate for value not less than the amount equal to 40% of the estimated cost put to tender. Solvency certificate issued from the Bidder's Banker shall be submitted. The certificate should not be more than six months old from the date of publication of tender.
- VI. The firm should have not been blacklisted, debarred, declared non performer or expelled from any work of Union Government/ State Governments/ PSUs etc. during the last 5 years. They should also submit a self-declaration on its letter head for the same. The firm should also provide information regarding litigation / arbitration cases for the last five years as per **Annexure-V**.
- VII. The tenderer may visit / examine the site and its surrounding to assess the accessibility and assess the scope of work before submitting their offer. No claims later on shall be entertained. The tenderers shall arrange & maintain at his own cost all materials, T & P, Water and facility for workers for executing the work. **Refer “Annexure-VI”**.
- VIII. The experience of completed works shall be in the name of Bidder Company. Experience of

completed works in Subsidiary / Group Company, Joint Venture Company or as sub-contractor shall not be considered and accepted.

Relevant document satisfying the above eligibility conditions on original client/company letter head must be uploaded / submitted along with the tender document.

3. INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the Central Public Procurement (CPP) Portal <http://eprocure.gov.in/eprocure/app>, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

3.1 REGISTRATION

- i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal by using the “Online Bidder Enrollment” option available on the home page. Enrolment on the CPP Portal is free of charge.
- ii) During enrolment/registration, the bidders should provide the correct/true information including valid email-id & mobile no. All the correspondence shall be made directly with the contractors/bidders through email-id provided.
- iii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- iv) For e-tendering possession of valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) is mandatory which can be obtained from SIFY/nCode/eMudra or any Certifying Authority recognized by CCA India on eToken/Smart Card.
- v) Upon enrolment on CPP Portal for e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.
- vi) Only one valid DSC should be registered by a bidder. Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse and should ensure safety of the same.
- vii) Bidders can then log into the site through the secured login by entering their user ID / password and the password of the DSC / eToken.

3.2 SEARCHING FOR TENDER DOCUMENTS

1. There is various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

The bidder should make a note of the unique Tender ID assigned to each tender; in case they want to obtain any clarification / help from the Helpdesk.

3.3 PREPARATION OF BIDS

- i) For preparation of bid, Bidder shall search the tender from published tender list available on site and download the complete tender document and should take into account corrigendum if any

published before submitting their bids. After selecting the tender document same shall be moved to the 'My favorite' folder of bidders account from where bidder can view all the details of the tender document.

- ii) Bidder shall go through the tender document carefully to understand the documents required to be submitted as part of the bid. Bidders shall note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- iii) Any pre-bid clarifications if required, then same may be obtained online through the tender site, or through the contract details given in the tender document.
- iv) Bidder, should get ready in advance the bid documents in the required format (PDF/xls/rar/dwf/ipg formats) to be submitted as indicated in the tender document / schedule. **Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.**
- v) Bidders can update will in advance, the documents such as experience certificates, annual report, PAN, EPF & other details etc., under "My Space/ Other Important Document" option, which can be submitted as per tender requirements, this will facilitate the bid submission process faster by reducing upload time of bids.

3.4 SUBMISSION OF BIDS

- i. Bidder should log into the site well in advance for bid submission so that he/she uploads the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii. Bidders should pay online the Tender Fee and EMD as per the instructions specified in the NIT/tender document. The details of the online payments should tally with the details available in the scanned copy and the date entered during bid submission time. Otherwise, the uploaded bid will be rejected.
- iii. While submitting the bids online, the bidder shall read the terms & conditions (of CPP portal) and accepts the same in order to proceed further to submit their bid.
- iv. Bidders shall select the payment option as online to pay the Tender Fee / EMD and enter details.
- v. Bidders shall digitally sign and upload the required bid documents one by one as indicated in the tender document.
- vi. Bidders shall not that the very act of using DSC for downloading the tender document and uploading their offers in deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.
- vii. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. For the file size of less than 1 MB, the transaction uploading time will be very fast.
- viii. **If price quotes are required in XLS format, utmost care shall be taken for uploading Schedule of quantities & Prices and any change/modification of the Bidders shall render it unfit for bidding. Bidders shall download the Schedule of Quantities & Prices i.e. Schedule-A, in XLS format and save it without changing the name of the file. Bidder shall quote their rate in figures in the appropriate cells, thereafter save and upload the file in financial bid cover (Price bid) only. If the template of Schedule of Quantities & Prices file is found to be modified / corrupted in the eventuality by the bidder, the bid will be rejected and further dealt as per provision of clause of ITB including forfeiture of EMD.**

The bidders are cautioned that uploading of financial bid elsewhere i.e. other than in cover 2 will result in rejection of the tender.

- ix. Bidders shall submit their bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock).

The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.

- x. After the bid submission (i.e. after Clicking “Freeze Bid Submission” in the portal), the bidders shall take print out of system generated acknowledgement number, and keep it as record of evidence for online submission of bid, which will also act as an entry pass to participate in the bid opening.
- xi. Bidders should follow the server time being displayed on bidder’s dashboard at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc. in the e-tender system.
- xii. All the documents being submitted by the bidders would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology.

3.5 ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender. The contact number for query related to tender document is 0129-2848426, 0129-2848427(10:00 AM to 5:00 PM).
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. Toll free number 1800-3070-2232.

CRITERIA FOR EVALUATION OF THE TECHNICAL AND FINANCIAL BID

This is an EPC project that includes Design, Supply, Installation, Testing, Commissioning (DSITC) of Sewerage Treatment Plant of Capacity 200KLD at NCR-Biotech Science Cluster, Faridabad. All offers should be submitted online in two parts: Technical and Price Bids, separately. The proposal should include details of the technical design based on the proposed layout and bill of quantities (BOQ). Interested contractors / agencies should visit the site for physical check and status of the site condition. All bidders will be called for a thirty-minute presentation. The presentation should include a brief introduction, plan for project execution, timeline and new suggestions that might include a better alternate layout plan/BOQ for a better utilization of the limited space and optimum running costs. The bids shall be ranked on the basis of combined weighted score for technical and financial bids. **The technical and financial bids shall enjoy weightage in the proportion of 70:30 i.e. 70% for the technical bid and 30% for the financial bid.**

2.0. (i) Criteria for evaluation of the technical bid: The technical bid marked as envelope 1 will be opened first and will be evaluated on the following parameters:

	Attributes	Evaluation
1.	Financial strength (i) Average annual (last three consecutive financial years) turnover of Rs. 39.15 lacs per year	(20 marks) (i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more In between (i) & (ii) – on pro-rata basis
2.	Experience in similar class of work	(20 marks)
i	One similar completed works of value Rs. 62.64 lacs or more or	(i) 60% marks for minimum eligibility criteria of works (ii) 100% marks for twice the minimum eligibility criteria or more
ii	Two similar completed works of value Rs. 46.98 lacs or more or	
iii	Three similar completed works of value Rs. 31.32 lacs or more	In between (i) & (ii) – on pro-rata basis for similar works.

3.	Performance on timely attending completion. Please attach completion certificate of timely / satisfactory commissioning from minimum two clients of cost not less than Rs. 46.98 lacs.	(05 marks) (i) 60% marks for minimum eligibility criteria of works (i.e. two works) (ii) 100% marks for twice or more the eligibility (i.e. four works) (iii) In between pro-rata
4	Experience of minimum one work of minimum value Rs. 46.98 lacs satisfactorily completed with Autonomous/PSU/Govt. organization. Please attach completion certificate signed by the client	(05 marks)
5	Performance of works (Quality), Based on report from the client	(10 marks) (i) Outstanding - 10 Marks (ii) Very Good – 07 Marks (iii) Good – 5 Marks (iv) Poor – 0 Marks
6	Presentation and Evaluation (Based on approach and methodology to perform the job as per the scope of work).	(40 marks) The presentation should clearly spell out the following points: 1) Brief history and financial strength (turn over) of the company. 2) Employee strength with brief breakup and credentials 3) Brief description of the execution of the work without Obstructing the work of existing STP. 4) Brief description, specifications of materials along with detailed list for Pumps, Filters, electrical panel, cables, panel SLD, valves, Plumbing, Civil Work, Finishing (floor, wall, ceiling etc). 5) As per the design concepts they propose for implementation with following details- - Time Schedule for preparation of drawings & design finalization - material delivery schedule - Site work schedule - Testing & validation schedule - Site execution team details & staff matrix. The bidder shall submit their design and specifications as per the guidelines for obtaining NOC from different authorities.
Total		= 100 marks

Bidders have to fulfil the minimum eligibility criteria for awarding the marks. Non fulfilment of minimum eligibility criteria will make the bid ineligible.

Bidders obtaining a minimum of 70 out of 100 marks in technical evaluation will only be shortlisted for further process

(ii) Financial bid evaluation: - The bids shall be ranked on the basis of combined weighted score for technical and financial bids. The technical and financial bids shall enjoy weightage in the proportion

of 70:30 i.e. 70% for the technical bid and 30% for the financial bid. The bidder quoting lowest rate will be awarded full points (100 marks). Other will be awarded pro-rata.

Financial score of the bidders will be determined using the following formula:

$FS = 100 \times (FL/F)$ Where,

'FS' is the financial score of an applicant,

'FL' is the lowest Financial Proposal among all and

'F' is the financial proposal of the particular applicant.

Combined scores of respective bidders shall be obtained by sum of their respective technical bid scores (out of 70) and their respective Price (financial) bid scores (out of 30) i.e. $S = TS \times 0.70 + FS \times 0.30$. The Tenderer who obtains the highest combined score will be awarded the contract.

INSTRUCTIONS TO THE BIDDER

Translational Health Science and Technology Institute (THSTI) is an autonomous institute of Deptt. of biotechnology, Ministry of Science & Technology, Govt. of India located in NCR-Biotech Science Cluster, 3rd mile stone, Faridabad-Gurugram Expressway, Faridabad, Haryana.

INSTRUCTION TO THE BIDDER FOR eProcurement

1. Preparation and Submission of Bids

a. The detailed tender documents may be downloaded from <http://eprocure.gov.in/eprocure/app> till the last date of submission of tender. The Tender may be submitted online through CPP Portal <http://eprocure.gov.in/eprocure/app>.

b. The bidder should submit the bid online in two parts viz. Technical Bid and Commercial Bid. Technical Bid, Tender Fee & EMD should be upload online in cover 1 and Commercial Bid in ".rar" should be upload online in cover 2.

2. Submission of the Bid: All interested eligible bidders are requested to submit their bids online On CPP Portal: <http://eprocure.gov.in/eprocure/app> as per the criteria given in this document:

- i. Technical Bid, Tender Fee & EMD shall be uploaded online in cover 1.
- ii. Commercial Bid shall be uploaded online in cover 2.

Both Technical and Commercial Bid covers should be placed online on the CPP Portal (<http://eprocure.gov.in/eprocure/app>).

3. Technical Bid: Signed and scanned copy of the Technical bid documents as under must be submitted online on CPP Portal: <http://eprocure.gov.in/eprocure/app>.

Check List of Certificates / Documents required to be submitted in the Technical Bid

(Under Cover 1)

If these documents are not submitted /conditions not met, the quotation shall be summarily rejected and no further correspondence, in this regard, shall be entertained.

S. No	Description	Technical Compliance (Yes/No)
1.	EMD Cost	
2.	Tender Fee	
3.	GST registration certificate	
4.	Pan No.	
5.	Non-black listing declaration	
6.	Site Inspection Certificate	
7.	Average Annual Turn Over	
8.	Solvency Certificate	
9.	Integrity Pact	
10.	Experience in similar nature of work	
11.	Signed form of acceptance of terms & conditions of item rate tender	
12.	Fall clause declaration	

13.	Declaration reg. Proprietorship/partnership / Pvt. Limited firm	
14.	Undertaking for adherence & acceptance to all Tender Terms as per Schedule – 'A' (No Deviation of Tender Terms)	
15.	The Firm / office / service Centre (Address proof)	

4. Financial Bid:

- a. The currency of all quoted rates shall be Indian Rupees. All payment shall be made in Indian Rupees.
 - b. In preparing the financial bids, bidders are expected to take into account the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the specified ".rar" format in Excel sheet attached as '.rar' with the tender and based on the scope of work, conditions and other terms of the Tender document. It should include all costs associated with the Scope of Work of the assignment.
 - c. The Financial Proposal should be inclusive of all applicable taxes, duties, fees, levies, and other charges imposed under the applicable laws. The rates quoted in the Tender are inclusive of all applicable taxes, duties etc.
 - d. The Financial bid should be according to the format given in the Tender Document. It should be ensured that no required value against an item is missed. If the bidder does not want to charge for an item the value must be filled as "0" (ZERO). All totals should be correct.
5. The bid 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 and downloaded from website <http://eprocure.gov.in/eprocure/app> free of cost.
 6. Information and Instructions for bidders posted on CPPP/website shall form part of bid document. Bidders are advised to visit CPPP regularly for latest update.
 7. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited EMD, tender fee and other documents scanned and uploaded are found in order.
 8. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website. The intending bidder must have valid class-III digital signature to submit the bid.
 9. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
 10. The Bidder can upload documents in the form of XLS format as available on CPP Portal.
 11. The Bidder must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
 12. When bids are invited in two / three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
 13. 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 bids are received satisfying the laid down criterion.

14. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time submission of the bid with all other relevant details.
15. The uploaded documents become readable only after the tender opening by the authorized bid openers.
16. Joint Venture Bids are not permitted and shall not be accepted or considered and shall be summarily rejected.
17. The Bidder shall furnish Tender processing fee (non-refundable) amounting to **Rs. 1,180/-** (Rs. One Thousand One Hundred Eighty only) by using online payment portal (<http://thsti.res.in/notification/tender.php>). The approved modes of payments are Net Banking, Debit Card, Credit Card and UPI.
18. The Bidder shall furnish Bid Security of **Rs. 1,60,000/- (Rupees One Lakh Sixty Thousand only)** in the form of the Earnest Money Deposit (EMD). The EMD shall be paid online by using online payment portal (<http://thsti.res.in/notification/tender.php>). The approved modes of payments are Net Banking, Debit Card, Credit Card and UPI. The bidder shall also furnish the EMD in form of Demand Draft issued from a scheduled bank in favour of **“EXECUTIVE DIRECTOR, THSTI Faridabad”**. In case the bidder furnishes the EMD in form of Demand Draft the same has to be physically submitted in the office before the opening of the bids. Any Bid not accompanied by an acceptable Bid Security and Tender Application Fee shall be summarily declared non-responsive and the envelope containing Technical Bid of such Bidder shall not be considered. The EMD of the successful bidder shall be returned after the successful submission of Performance Guarantee and for unsuccessful bidder(s), it would be returned after award of the contract.
19. **Small scale Industries registered with the national small scale industries corporation shall not be exempted from payment of earnest money deposit & tender fee.**
20. THSTI is committed to follow the principle of transparency, equity and competitiveness in public procurement. Before submission of bid each bidder should sign integrity pact at respective places and submit the bid. If duly signed integrity pact is not submitted by bidder, such bid shall not be considered.
21. Some restrictions may be imposed by the security staff of THSTI etc. on the working and or movement of labour & material. No labour camp / huts shall be allowed in the functional area of cluster (40 Acres). The contractor shall make his own arrangement for labour huts in 85 acres (if required). The contractor shall be bound to follow all such restrictions/ instructions and nothing shall be payable on this account.
22. After the award of work, if agency fails to start the work or does not perform the awarded work properly and/or in time, the earnest money, security deposited and performance guarantee submitted by the agency will be forfeited 100% and the agency will be debarred for a period of three years to participate in any tender for THSTI work.
23. All tools and plants, equipment's required for execution of work must be provided by the agency at his own cost for the execution of the work at site.
24. All precautionary measures should be adopted for the safety purposes for any accident during the executions of work occurring at site, the contractor shall be overall responsible for the same.
25. The Firms are advised to read the Bid documents carefully and visit the site, at their own cost, to understand the site and to assess the work requirement and scope on any working day before the closing of tender submission date.

Format ‘ A’

(To be submitted on Company Letter Head).

AUTHORIZATION LETTER

We _____ (name of the bidder) hereby authorize Shri / Smt. _____
(name of the authorized person) to sign and submit the bid to THSTI, Faridabad against their tender
No.: _____ Date: _____

Shri / Smt. _____ (name) is also authorized to negotiate the terms and conditions
pertaining to the said tender on behalf of M/s _____ (name of bidder). The
specimen signature of Shri / Smt. _____ (name) is appended below.

Specimen Signature:
Name: _____

The undersigned is authorized to delegate the authority on behalf of M/s _____ (name
of bidder), as stipulated above.

For _____ (name of bidder)

TENDER ACCEPTANCE LETTER

(To be submitted on Company Letter Head).

Date:

The Executive Director

Translational Health Science and Technology Institute NCR Biotech Science Cluster,
3rd Milestone, Faridabad–Gurugram Expressway, Faridabad – 121001.

SUB: Acceptance of Terms & Conditions of Tender. Tender Reference No :THS/Civil/NIT/24-25/11

Name of Work: “Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad”

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned ‘Tender / Work’ from the web site(s) namely: www.thsti.res.in, <https://eprocure.gov.in> as per your NIT / advertisement, given in the abovementioned website(s).
2. I / We hereby certify that I / We have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedules(s), etc.), which form part of the contract agreement and I / We shall abide hereby by the terms / conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality/ entirety.
5. I / We do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department / Public sector undertaking.
6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject the bidder terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the fully said earnest money deposit absolutely.

Yours Faithfully,

Authorized Signatory.

(Signature of the Bidder, with Official Seal)

Format ‘ C’

Fall Clause Declaration

Ref: File No.:-----

Date :

Name of Work: Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad.

This is to certify that we have offered the maximum possible discount to you in our Quotation /bid No. _____ dated_____.

The prices charged for the stores supplied under Rate Contract should under no event be higher than lowest prices at which the party sells the items of identical description to any other Govt. organization/PSU's/Autonomous bodies/Pvt. Organizations during the period of contract failing which the "FALL CLAUSE" will be applicable.

In case, if the price charged by our firm is more, THSTI Faridabad will have the right to recover the excess charged amount from the subsequent/unpaid bill of the supplier.

Seal and Signature of the Bidder

Note: This letter of authority should be on the letterhead of the quoting firm and should be signed by a person competent and having the power of attorney to bind the same

Format ‘ D’

NON-BLACK LISTING DECLARATION

FORMAT OF UNDERTAKING, TO BE FURNISHED ON COMPANY LETTER HEAD WITH REGARD TO
BLACKLISTING/ NON- DEBARMENT, BY ORGANISATION

UNDERTAKING REGARDING BLACKLISTING / NON – DEBARMENT

To,
Executive Director
Translational Health Science and Technology Institute
NCR-Biotech Science Cluster,
3rd Milestone, Faridabad-Gurgaon Expressway, Faridabad

We hereby confirm and declare that we, M/s -----, is not blacklisted/
De-registered/ debarred by any Government department/ Public Sector Undertaking/ Private Sector/ or
any other agency for which we have Executed/ Undertaken the works/ Services during the last 5 years.

For -----

Authorized Signatory

Date:

TRANSLATIONAL HEALTH SCIENCE AND TECHNOLOGY INSTITUTE
NCR-Biotech science cluster, 3rd mile stone, Faridabad Gurgaon Expressway, Faridabad

INTEGRITY PACT

To,

Sr. Technical Officer- Civil,

.....,
.....

Sub: Submission of Tender for the work of

Dear Sir,

I/We acknowledge that CPWD is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by CPWD. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, CPWD shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/ bid.

Yours faithfully
(Duly authorized signatory of the Bidder)

CONDITIONS OF CONTRACT AND TECHNICAL SPECIFICATIONS

1. General Conditions:

- i. Standard General Conditions of the Contract (GCC) form 7/8 (modified and corrected up to date) of CPWD shall be followed except otherwise stated elsewhere in the tender document.
- ii. The contractor shall submit an irrevocable **Performance Guarantee of 5%** (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within 15 days from the date of issue of letter of intent. This period can be further extended by the Engineer-in-Charge up to a maximum period of one week on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. 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/FDR 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 Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto.
- iii. The Performance Guarantee shall be initially valid up to the stipulated date of completion plus minimum 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- iv. The completion certificate shall be recorded by the concerned Engineer- in-charge with the approval of Competent Authority. After recording of the Completion Certificate for the work by the competent authority, the 100 % of performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving operation / maintenance of building and services /any other work after construction of same building and services/ other work, then 40% of performance guarantee shall be returned to the contractor, without any interest after recording the provisional Completion certificate and the rest would be after the successful completion of CAMC period.
- v. The **Security Deposit @ 5%** of work value will be deducted from the bill, which will be released after completion of defects liability period i.e. 12 months from date of completion of work.
- vi. The terms 'Contract document' means the Notice Inviting Tender, Tender form, Instructions to bidders, Special Conditions, General Conditions of Contract, Specifications, Price Schedule and Drawings and Articles of Agreement.
- vii. "THSTI" shall mean Translational Health Science and Technology Institute with its present office at 3rd mile stone Faridabad - Gurgaon Expressway Haryana 121001.
- viii. The Contractor shall mean the sole proprietor, or firm or company whether incorporated or not, undertaking the works and shall include the legal representative or such individual successors, heirs, administrators or assignees of such sole proprietor, firm or company, as the case may be or the persons composing such firm or company of the successors of such firm or company and the permitted assignees of such individual or firms or company.
- ix. "Client" shall mean the officer designated by the Executive Director, THSTI who shall supervise and shall be in charge of the work, and issue necessary instructions at site, on behalf of THSTI.
- x. Failure of the successful contractor to lodge the required performance guarantee shall constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security, in which event

the THSTI may make the Award to the next lowest evaluated tenderer or, if there are no other tenderer, call for new bids.

- xi. In the event of breach of contract by the contractor, the performance guarantee will liable to be forfeited by THSTI.
- xii. "Site" shall mean the places provided by the Employer where the Works are to be executed and any other places as may be specifically designated in the Contract as forming part of the Site (i.e. Existing STP adjacent to the ATPC Building near the Gorge).
- xiii. **Validity of the bids:** The bids shall be valid for a period of 120 days from the receipt of technical bid. This has to be so specified by the tenderer in the commercial bid.
- xiv. **Warranty / Guarantee:** Bidder must provide one (01) year comprehensive on-site warranty and it will commence from the date of the satisfactory installation / commissioning/handing over of goods, against the defect of any manufacturing, workmanship and poor quality of the components. No offer of the vendor will be accepted without warranty/ guarantee of their supplied/ installed goods.
- xv. **Installation / Execution:** All works shall be completed within three (3) months from the date of issue of the work order by the agency. The agency shall ensure that the entire Sewage Treatment Plant (STP) is constructed using Moving Bed Biofilm Reactor (MBBR) technology and shall be handed over in full working condition, with performance parameters meeting or exceeding the standards set by the relevant IS practices. No additional payments shall be made separately for any aspect of the installation. The supplier shall bear exclusive responsibility for the safe installation and execution of all works associated with the STP. If the supplier fails to complete the work on or before the stipulated date, then a compensation for delay of work @ 1.5% per month of delay of work to be computed on per day basis provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work.

2.0 Payment Terms:

The pre-receipted paste of 1 revenue stamp on each bill in triplicate may be send to this office for payment after satisfactorily delivery & Installation of the goods. The bill should have full particulars of the items.

- a) The payment would be released based on criteria mentioned in **below Table - A.**
- b) No payment will be made for goods rejected.
- c) EMD shall be released on submission of performance security of requisite amount or can be adjusted against Security Deposit.
- d) The rates must be inclusive of all applicable Taxes (all taxes, duties, levies, GST), handling and freight charges etc. & all applicable taxes shall be deducted at source from the passed amount of the contractor bill.

TABLE – A			
STAGES OF PAYMENTS			
S.No	Stage Description /	Payment Limit (% of Contract amount)	Remarks
<u>NAME OF WORK</u> : Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad			
Stage - 1	Design & Procurement: On delivery of materials and equipment's at site required for the execution of works to make the STP well functional.	Up to 45%	Payment of this stage (i.e. stage - 1) shall be made on pro –rata basis, which will be based on the delivery of materials / equipment's required for the execution of works at site. Total 70% amount of original invoices of material / equipment delivered at site shall be considered for intermediate payments of running account bills subject to the maximum 45% amount of total contract value.
Stage - 2	Installation and Commissioning: On execution / construction / installation of work / equipment at site.	Up to 35%	Payment of this stage (i.e. stage - 2) shall be made on pro –rata basis, which will be based on the execution / construction / installation and commissioning of work / equipment's at site. Actual progress of work execution at site shall be assessed and considered for intermediate payments of running account bills subject to the maximum 35% amount of total contract value.
Stage - 3	Validation and handing over: On submission of validation report as per the guidelines mentioned in NIT and handing over to the client.	Up to 15%	Payment of this stage (i.e. stage - 3) shall be made on submission of STP validation report as per the guidelines mentioned in NIT and handing over to the Client.
Stage - 4	On completion of Defects liability period (except security deposit)	5%	Payment of this stage (i.e. stage - 4) shall be made on successfully completion of defects liability period (12 Months). The security deposit shall be released separately as per clause v of general conditions of this tender.

3.0 Drawings

On the award of work order under this work, the contractor shall immediately proceed with the preparation of drawing according to the work order to be carried out. Two sets of such working drawings including make of all items shall be submitted to THSTI for its approval to ensure that work will be carried out in accordance with specification and proposed drawing including such changes as may have been mutually agreed upon. All the drawing shall be received by the Client for his approval within 10 days of award of work. Also, the contractor must furnish detailed bar chart showing the various activity w.r.t. time and must organize co-ordination meeting at the site to review the progress of work.

4.0 Time for completion

Time for completion of total execution work (i.e. Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad) shall be **180 days** from the date of award of work.

5.0 Time and Extension for delay

- a) If in the opinion of the Client the works is delayed by:
- b) Force majeure.
- c) Reasons of civil commotion, location combination of workers on strike or lock-out affecting any of the building trades.
- d) In consequence of the contractor for not having received in due time necessary instructions from the Client for which he shall have specifically applied in writing.
- e) Reasons of Client instruction:
- f) The Client shall make a fair and reasonable extension of time for completion of the contract works. Then upon the happenings of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in- charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Client to proceed with the works.
- g) Request for rescheduling of date of completion and extension of time, to be eligible for consideration, shall be made by the Contractor in writing immediately after the happenings of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- h) In such case, the Client may give a fair and reasonable extension of time and reschedule the completion date. Such extension shall be communicated to the Contractor by the Client in writing within 1 month of the date of receipt of such a request. Non- application by the Contractor for extension of time shall not be a bar for giving a fair and reasonable extension by Client and this shall be binding on the Contractor.

6.0 Compensation for delay

- a) Time is the essence of the contract. The time allowed for the work shall be strictly followed. If the supplier fails to complete the work on or before the stipulated date, then a compensation for delay of work @ 1.5% per month of delay of work to be computed on per day basis provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work. The decision of Client about the delay shall final and binding.
- b) If the contractor after award of work fails to deliver any item / part of the work within the time period allowed, THSTI reserves the right to remove that particular component from the scope of main contractor and get it done through some alternative resources at the cost of main contractor.

7.0 Technical Specifications and Standards

The materials & services to be provided by the tenderer under this contract shall conform to the technical specifications as laid down under this tender document and shall be carried out to the complete satisfaction of the Client.

8.0 Work open to inspection

8.1 All works under or in course of execution or being executed in pursuance of the contract shall at all times be open to inspection and supervision by the Client and/or his authorized subordinates, and the Contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Client or his subordinate to visit the works shall have been given to the contractor, either himself be present to receive order and instructions, or have a responsible agent duly accredited in writing, present for that purpose. Order given to the contractor's agent shall be considered to have the same force as if the same had been given to the Contractor himself.

8.2 All works shall be executed subject to the approval in all respect of the Client who shall be entitled to direct at what point or points and in what manner these are to be commenced, and carried out from time to time.

9.0 Inspection, Testing and Quality Control

9.1 THSTI and/or its nominated representative(s) will, inspect and/or test the work / material to confirm their conformity to the tender specification at no extra cost to the THSTI. The Inspection Authority to be designated by the THSTI shall specify what inspections and tests are required and where they are to be conducted. The THSTI shall notify the contractor in writing in a timely manner of the identity of any representatives retained for this purpose. All work / material shall be tested as stipulated in the latest specification of, Govt. /institutes.

9.2 The inspections and tests may be conducted on the premises of the tenderer or its subcontractor(s) or at the point of delivery. If conducted on the premises of the tenderer or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the Inspectors at no charge to the THSTI.

9.3 The representative of Centre shall inspect or test the items, which fail to conform to the specifications. The THSTI may reject such items and the tenderer shall replace the rejected items, at no cost to the THSTI, within a stipulated time period.

9.4 The THSTI's right to inspect, test and where necessary, reject the items after its arrival at the final destination shall in no way be limited or waived by reason of the items having previously been inspected, tested and passed by THSTI or its representatives.

9.5 Nothing shall in any way release the tenderer from Guaranty or other obligations under the contract.

9.6 The THSTI shall be the final authority to reject full or any part of the item which is not conforming to the specifications and other terms & conditions.

9.7 No payment shall be made for rejected items. Rejected items must be removed by the contractor within one weeks of the date of rejection at their own cost and replace immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the contractor without any further notice.

10.0 Packing and Marking

10.1 The packing of items to be supplied directly at site, should be strong and durable enough to withstand, without limitation, the entire journey during transit including trans-shipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the supplied Items and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

10.2 The quality of packing, the manner of marking within & outside the packages and provision of

accompanying documentation shall strictly comply with the requirements as per site condition. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the tenderer accordingly.

10.3 Packing instructions:

The tenderer shall make separate packages for each consignee (in case there is more than one consignee mentioned in the work order) and mark each package on three sides with the following with indelible paint of proper quality:

- a. Contract number and date
- b. Brief description of items including quantity
- c. Packing list reference number
- d. Country of origin of supplied items
- e. Consignee's name and full address
- f. Tenderer's name and address

11.0 Water and Power for Fabrication

The contractor shall make his own arrangement of water required for execution of work at own cost. However, THSTI shall provide power at one point for the proper execution of the work under normal circumstances, if available at site. Contractor shall be liable to pay for power charges for the actual consumption at the rates notified by DHBVN /THSTI from time to time. In case THSTI is not in a position to supply the power, the contractor will make his own arrangement so that the work does not suffer. However, no claim of the contractor whatsoever shall be entertained by THSTI on this account.

12.0 Co-ordination

Work shall be carried out in such a manner that the work of other agencies operating at the site is not hampered due to any action of the contractor. Proper co-ordination with other agencies will be contractor's responsibility. In case of any dispute the decision of THSTI shall be final & binding on the contractor.

13.0 Clearance of Site

The contractor shall have to remove all waste (Malba) and other unwanted material from site of work before handing over the installation to the THSTI. The work shall not be treated as complete in all respects unless these requirements are fulfilled by him. In the event of contractor failing to do so, the THSTI shall have right to get the site cleared at the cost of contractor.

14.0 Compliance with labour laws and other laws

The Contractor shall abide by the Contract Labour, (Regulation and Abolition) Act 1970, and Contract Labour (Abolition and Regulation) Central rules 1971. The Contractor shall comply with the provisions of Payment of Wages Act 1936, Minimum Wages Act 1948, Employees Liability Act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act and other applicable regulations and other labour laws Contract Labour as mentioned below as applicable amended up to date:

- 1) Industrial Disputes Act.
- 2) Industrial Establishment (Standing orders) Act.
- 3) Trade Unions Act.
- 4) The Factors Act.
- 5) Employees Provident Fund & Miscellaneous Provision Act.
- 6) Employees State Insurance Act. Workmen's Compensation Act.
- 7) Payment of Gratuity Act.
- 8) Minimum Wages Act.

- 9) Payment of Wages Act.
- 10) Equal Remuneration Act.
- 11) Payment of Bonus Act.
- 12) National / Weekly Holiday Act.
- 13) Inter-state Migrant Workmen (Regulation of Employment and of service conditions) Act.

In case, THSTI is made liable to pay any amount to any third party due to non-observance of any of the statutes/law as mentioned above, the same will be adjusted from any future payment due payable to the contractor or from performance s guarantee available with THSTI.

15.0 Safety Code, Labour Camps Sanitary Arrangements

The Contractor shall follow the Safety Code and Model Rules for the Protection of health and Sanitary arrangement for Workers as prescribed by the CPWD as regard to safety code and first aid facilities. In case, the Contractor fails to make the aforesaid arrangement, the Executive Director THSTI shall be entitled to do so at the risk, responsibility and cost of the Contractor. Determent panel and legal action shall be taken in the event of any failure on the part of the contractor to discharge the safety obligations which are laid down in the contract.

16.0 Payment of wages by the contractor

The Contractor shall directly pay to labour employed by him and shall be solely responsible for following all Government rules and regulations applicable for employment.

17.0 Watch and Ward

The contractor shall be responsible for watch and ward of all the works and various materials till complete handing over the works to the THSTI.

18.0 Removal of Person

The Client may require the Contractor to remove from the site of the work any person or persons in the Contractor's employment who may found to be incompetent or due to misconduct and the Contractor shall forthwith comply with such requirement / instructions.

19.0 Guarantee Clause

19.1 The contractor shall guarantee that all the material and components supplied and installed by him shall be free from defects due to faulty, material or workmanship.

19.2 The charge and any shortcomings found in the materials as specified shall be removed at no extra cost. The contractor shall provide the necessary personnel and tools for fulfilling the above guarantee. Period of the guarantee shall be (12) twelve months from the date of handing over the complete installations to THSTI. During this period any or all components found to be defective shall be replaced or repaired free of cost.

19.3 If the defects are not removed within a reasonable time the THSTI may arrange to do at the contractor's risk and cost, without prejudice to any other rights.

19.4 After Sales Service: After sales service should be made available on 24 (hrs.) X 7 (days) X 365 (days) basis. Complaints should be attended promptly and properly within 24 hrs. The service should be provided directly by the tenderer or his authorized agent whose details shall be provided to the THSTI/consignee within one month from the date of award of contract.

20.0 Price fall Clause

If at any time during the validity of the work the tenderer supplies such equipment's/stores as are under this tender enquiry, to any other organization at a price lower than the price quoted under this contract, he shall forthwith reduce the price payable under this tender for the equipment's/ stores being supplied from the date of coming into force of such reduction, the price of equipment's/ stores shall stand correspondingly reduced. In case of increase in market prevailing prices of the materials if claimed by the supplier, no price escalation will be payable.

21.0 Other Condition to Be Adhere by Tenderer

- I. The work is to be carried out as per the specifications in the tender and relevant standards of CPWD and in line with the BMBL guidelines and as per the WHO Geneva, Laboratory Biosafety Manual.
- II. The material should be got approved before start of work and open to site inspection. The contractor shall clear the site after completion of work in all respects.
- III. All the material used shall be one of the stipulated makes as per approved list of material.
- IV. The contractor shall comply with safety codes for Fire precaution, health requirement, scaffolds & ladders etc.
- V. No T & P shall be issued by THSTI.
- VI. All dismantled material for which credit is not being given in the tender shall be handed over to the site engineer stored at proper place.
- VII. Contractor shall be fully responsible for safety of his workers and in case of any accident / mishap the entire responsibility shall be on the contractor.
- VIII. The work shall be executed without any loss / damage to the THSTI's properties.
- IX. The picture provided in the specification is for illustration purposes only and not to scale.

22.0 Interpretation

In interpretation of specifications, the following orders shall be as followed: -

- a) Drawings
- b) Technical Specification
- c) Special Conditions of contracts
- d) General condition of contract

Matters not covered by the specification given in this contract as a whole shall be covered by relevant and latest Indian Standard codes/ C.P.W.D code. If such codes on a particular subject have not been framed, the decision of the owner/ owner's representative shall be final and binding.

23.0 Termination

Being a standing offer, the work can be terminated from either side by serving one month's notice to the other party. However, all the orders placed before the date of serving of such notice will be valid and binding on both the parties. Further, the orders placed under the work can also be terminated individually and the same will not lead to automatic termination of work unless so specified.

Termination of work order.

Notwithstanding anything elsewhere provided herein and in addition to any other right or remedy available to THSTI under the work or otherwise including right of THSTI to claim compensation for delay, THSTI may, without prejudice to his right against contractor in respect of any delay, bad workmanship or otherwise or to any claims for damage in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this work or otherwise and whether the date for completion has or has not elapsed by intimation in writing, absolutely determine and terminate the Contract.

Default or failure by the contractor in any of the under mentioned cases, including but not limited to the following shall be the basis of taking action under this clause of the contract.

- 1) Failure to provide at the job site, sufficient labor, material, equipment, machinery, and / or facilities, required for the proper and / or due execution of the work or any part thereof:
- 2) Failure to execute the works or any of them in accordance with the contract.
- 3) Disobedience of any order or instruction of the Engineer-in- charge.
- 4) Negligence in carrying out the work or carrying out of work found to be unsatisfactory by the Client.
- 5) Abandonment of the works or any part thereof.
- 6) If the Contractor misconduct in any manner.
- 7) Delay in execution of work, which in opinion of Client shall delay the completion of work beyond the

stipulated date of completion.

- 8) Distress, execution, or other legal process being levied on or upon any of the Contractor's goods and /or assets.
- 9) Death of Contractor (if an individual)
- 10) If the Contractor or any person employed by him shall make or offer for any purpose connected with the contract any gift, gratuity, royalty, commission, gratification or other inducement (whether money or in any other form) to any employee or agent to THSTI.

The decision of the Executive Director, THSTI as to whether any of the events/ contingencies mentioned in aforesaid clauses entitling THSTI to terminate the contract has occurred shall be final and binding upon the Contractor. The jobs left however by the Contractor shall be got done at his risk and cost through the other agencies and the Contract shall be determined accordingly.

25.0 Force Majeure

The right of the contractor to proceed with the work shall not be terminated because of any delay in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the contractor, including but not limited to acts of God, or of the public enemy, restraints of a sovereign state, floods, unusual severe weather conditions.

26.0 Arbitration

Any claim, dispute or difference arising out of or in connection with this agreement and which cannot be settled by mutual consultations, shall be referred to sole Arbitration or an Arbitrator to be appointed by mutual consultations. The award of the Arbitrator shall be final and binding between the parties as per the terms and conditions of the Agreement to be executed on award of contract. The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act – 1996 and updated in 2015 & 2019.

ANNEXURE - I

APPLICATION FORM

[NOTE: On the letterhead of the applicant including full postal address, email address, telephone no. and fax no.]

Date: _____

The Executive Director
Translational Health Science and Technology Institute
NCR Biotech Science Cluster
3rd Milestone Faridabad Gurgaon Expressway Faridabad 121001.

Sirs,

1. Being duly authorized to represent and act on behalf of
(hereinafter referred to as “the Applicant”) and having reviewed and fully understood all the pre-qualification information provided, the undersigned hereby applies to be pre-qualified by yourselves as a tenderer for award of work(s) for Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad.
2. Attached to this letter are copies or original documents defining:
 - (a) the applicant’s legal status
 - (b) the principal place of business
 - (c) the place of incorporation (for applicants who are corporations) or the place of registration and the nationality of the owners (for applicants who are partnerships or individually owned firms)
 - (d) Annexure no. II to IX (placed below)
3. Your agency and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This letter of application will also serve as authorization to any individual or authorized representative or any institution referred to in the supporting information, to provide such information deemed necessary and requested by you to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.
4. Your agency and its authorized representatives may contact the following persons for further information on general, personnel, technical and financial enquiries.

Contact 1: Name, email and Phone no. Contact 2: Name, email and phone no.
5. This application is made with the full understanding that:
 - (a) Bids submitted by applicants will be subject to verification of all information submitted at the time of bidding
 - (b) Your agency reserves the right to:
 - amend the scope and value of the contract / bid under this project; in such event, bids will only be called from pre-qualified bidders who meet the revised requirements; and
 - reject or accept any application, cancel the pre-qualification process, and reject all applications

without assigning reasons or incurring any liability thereof; and

- (c) Your agency shall not be liable for any such actions and shall be under no obligation to inform the applicant.
- 6. The undersigned declares that statements made and the information provided in the duly completed application are true and correct in every detail.

Signed and sealed, Name

For and on behalf of.....

ANNEXURE - II

GENERAL INFORMATION

.	Name of Firm	
	Head office address	
	Telephone	Contact No
	Fax. No.	Email ID
.	Place of Incorporation registration	Year of incorporation/registration

Signature and seal of the Authorized Signatory of the bidder

ANNEXURE - III**FINANCIAL CAPABILITY**

Financial Year	Annual Turn Over in Indian Rupees (or equivalent to Indian Rupees) as per Audited Balance Sheet
2022-2023	₹
2023-2024	₹
2024-2025	₹

NOTE: The above data is to be supported by audited balance sheets

1. Attach copies of audited balance sheets duly certified by the chartered accountant for all three years (**2022-2023, 2023-2024, 2024-2025**). Audited Balance sheet should mention the membership number of chartered accountant issued by ICAI along with full address.
2. Attach recent solvency certificate from bankers. The certificate should be no more than one-year old from the date of submission of bid.

Signature and seal of the Authorized Signatory of the bidder

ANNEXURE – IV

EXPERIENCE OF COMPLETION OF PROJECTS OF SIMILAR NATURE & COMPLEXITY

(During last seven years ending last day of month previous to the one in which applications are invited)

	Name of work/project and location	Owner or sponsoring organization	Cost of work in Lacs	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Name and address/ telephone number of officer to whom reference maybe made	Remarks

NOTE: Please attach supporting documents (completion certificates along with order copies) for the above information

Signature and seal of the Authorized Signatory of the bidder

ANNEXURE – V

LITIGATION DETAILS (COURT CASES/ARBITRATION)

Year	Name of the work	Name of the client with address	Title of the court case/ Arbitration	Detail of the Court/ Arbitrator	Status pending/ decided	Dispute Amount (Current Value, the equivalent) in case of court cases/arbitration	Actual awarded amount (Rs.) in decided court case/ arbitration

Signature and seal of the Authorized Signatory of the bidder

CERTIFICATE FOR SITE INSPECTION

Certified that we..... (Name of tenderer) have visited the site on dated.....

and assessed the nature and amount of work involved before submitting our offer. We will be able to complete the works within the stipulated time and also certified that we will be able to supply the material/executing the work as per specification to suit the site conditions.

Address of site:

NCR-Biotech Science Cluster,
3rd Milestone, Faridabad-Gurugram Expressway,
Faridabad 121001, Haryana.

Signature and seal of the Authorized Signatory of the bidder

ANNEXURE – VII

FORM OF AGREEMENT

This Agreement made on the _____ day of _____ 20____ between Translational Health Science and Technology Institute (THSTI), Faridabad, Haryana for entering into the work(s) for "Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad" (here in after called "The Employer") who enters into this Agreement of the one part and M/s..... (hereinafter called "The Contractor") of the other part.

Whereas the Employer is desirous that certain works should be executed by the Contractor, viz _____ ("the Works") and has accepted a Bid by the Contractor for the execution and completion of the works and the remedying of any defects therein.

Now this Agreement witnessed as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) The Letter of Commencement;
 - (b) The Letter of Intent;
 - (c) The said Bid;
 - (d) The General Conditions of Contract;
 - (e) Prequalification document
 - (f) Instructions to Tenderers and Specific Conditions of Contract;
 - (g) The Specification;
 - (h) The Drawings;
 - (i) The Priced Bid
 - (j) Any other relevant documents referred to in this Agreement or in the aforementioned documents
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of this work.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or only such other sums as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract

In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written.

Signed, Sealed, and Delivered by the Said

Binding Signature for and on behalf of THSTI-Faridabad Binding Signature of Contractor __

In the presence of:-

Witness (1):

Witness (2):

ANNEXURE – VIII

SCHEDULE OF CONTRACT

1.	Earnest Money to be deposited	Rs. 1,60,000/-
2.	Time of Completion	06 (Six) months from the date of award of Contract.
3.	Compensation for delay	1.5% per month to be calculated on per day basis.
4.	Defect Liability Period	12 months from the date of completion and handing over of work.
5.	Terms of Payments	30 days after submission of bill invoice and required documents, warranty certificate etc.
6.	Schedule of Payment	As per Table - A of payment terms in conditions of contract

NOTE

In this NIT/Agreement wherever the word mentioned under column 'A' appear the same may be construed to mean the word opposite to it in column 'B' as given below except for CPWD Contractor's labour Regulation, CPWD Safety Code, CPWD Specification and Delhi Schedule of Rates CPWD.

'A'

Central PWD, CPWD

President of India

Chief Engineer

Engineer In charge

'B'

Translational Health Science and Technology Institute (THSTI)

Executive Director, THSTI

Head-Administration

Sr. Technical Officer (Civil)

27.0 SCOPE OF WORK

The tender is invited on EPC mode for "Expansion and Modification of the Existing Sewerage Treatment Plant at NCR Biotech Science Cluster Faridabad" including Designing, Engineering, Supplying, Construction, Erection and Commissioning of Sewage Treatment Plant (STP), to give treated effluent quality as per standards as well as that specified in the Guarantee clause attached herewith & includes the items which are within the scope of contract. The drawings attached herewith are preliminary. However, the successful contractor will be required to submit the Detailed Process & Structural drawings (shop drawings) incorporating the equipments/pumps/filter/etc. These detailed drawings shall be submitted to the client for their comments & approval. All the works shall be carried out as per final "Approved design & drawings" only.

1. Civil works and structural steel fabrication works required for equipments/pumps/filters, tanks for the Sewage treatment plant and retrofitting of the structure of the STP shall be done as required by civil contractor
2. Complete interconnecting piping between various units as per requirement including supply of all materials like pipes, fittings, all valves, gaskets, flanges, nuts and bolts including all materials required for necessary pipe supports and associated civil works, etc., complete.
3. Supply, erection and commissioning of all the equipments required for the sewage treatment plant as per the individual equipment specification and details given herewith
4. All electrical works including all electrical motors for the various equipment, cabling, LT panel, starters, etc., will be provided by the contractor. The scope of work includes all necessary civil works like construction of panel foundations, cable trenches, cable supports, lighting of entire plant as per drawing etc., complete. Commissioning of all the equipment after the electricity is supplied will be within the scope of contract.

TENDER DRAWINGS:

The following tender drawings of the STP is attached for reference purpose and guidance to the Bidders to understand the scope of work:

- i. Basic Architecture Layout Plan

The Bidder/executing agency shall check and verify the correctness of dimensions and quantities given and indicated in the tender drawings. The work shall be executed as given and detailed in the scope of work, technical specifications and the final design and drawings to be submitted by the Bidder and approved by the Employer.

28.0 BROAD TECHNICAL SPECIFICATIONS OF THE STP

28.1 Shop Drawings for 200 KLD Plant.

- 28.1.1 Detailed GA drawing, flow diagram, equipment list, power load requirement
- 28.1.2 Design, calculations of all elements of the plant, electrical and mechanical work to satisfy adequacy of design
- 28.1.3 Submission of detailed stage architectural, structural, construction, electrical, mechanical and piping drawing for approval.

29.2 SEWAGE TREATMENT PLANT

29.2.1 Design, Supplying, Installing, Testing & Commissioning of Sewage Treatment Plant of capacity 200 kld with tertiary treatment. The electrical and mechanicals for plant proposed shall have capacity to handle 200 kld including civil work. The plant is proposed to be installed below ground in a dedicated plot accessible from the below ground pump room itself for future maintenance. Any Opening provided on main slab above for this purpose shall be repaired and restored to good condition prior to the handover of the site. The design should be as per the following duty:

Nature of effluent - Domestic Sewage from Toilet use and kitchen waste.

Daily average flow - 200 Cum / Day.

pH - 6.5 - 8.0

BOD5 - upto 250-350 Mg/L

S. Solids - 250 - 400 Mg/L

COD - upto 450-600 Mg/L

Oil & Grease - 50 Mg / L

***Effluent discharge standard after treatment**

pH - 6.5 - 8.5

BOD5 - Less than 10 Mg/L

S. Solids - Less than 20 Mg/L

COD - Less than 50 Mg/L

Oil & Grease: < 5 Mg/L

NH₄N < 5 Mg/L

N Total < 10 Mg/L

Oil & Grease: < 5 Mg/L

*Note: The above parameter should be as per IS parameter.

29.2.2 Perforated Screen:

Supply, installation, testing & commissioning of 2 Nos Stainless Steel Perforated Screen with suitable lifting arrangement (size 450 mm wide x 600 mm high approx.) with 10 mm and 8 mm clear spacing.

29.2.3 Level Indicator & Controller:

Supply, installation, testing & commissioning of electronic type level indicator and controller for automatic operation of the system with high/low level alarm complete with auxiliary NO/NC contacts. (Contractor shall ensure submission of detailed GA drawings (Plan & Section), P & I diagram, schematic diagram for the above-mentioned components and additional components such as inserts, puddle flanges, vent pipes etc. if so, required for the complete working of the STP and got it approved by the Owner's/ Architect / Project Manager / Consultants. (Equalization Tank, clarified water Tank, Treated water Tanks etc.).

29.2.4 Non-Clogging Pumps:

Supply, installation, testing & commissioning of non-clogging type pumps with all accessories having CI casing & CI impeller complete with all accessories, motor of required capacity. Pressure gauge on delivery line with isolation cock, level controller (with wiring) to control the level of sump automatically. Pumps shall have followed duty.

Submersible Sump Pumps in equalisation tank. (Each Set 2 Nos. 1 working & 1 standby).

Vendor shall provide the by-pass line back to equalisation tank.

(Solid handling cap. 35 mm)

Flow rate (each) = 10 m³ / hr

Head = 8-10 Mr

Plant room sump pump 2 Nos (1 working + 1 standby)

Flow rate = 27 cum/hr

Head = 12-15 Mts

(Solid handling size for this pump shall be minimum 15 mm)

Cost shall be inclusive of PVC flexible Hose pipe (for piping submerged in effluent) with M. S epoxy piping (for piping non-submerged in effluent)

Provision of guide ropes to guide submersible pump from upper level to operational level in sump basin with channels/angle section of MSEP shall be made by the STP contractor.

29.2.5 Centrifugal Monoblock self-priming Sludge Transfer pumps

Centrifugal Monoblock self-priming Sludge Transfer pumps 2 Nos (1 working & 1 stand by).

(Solid handling size for this pump shall be 7 mm).
Flow rate (each) = 5 cum / hr or as required
Head = 8-10 Mtr

29.2.6 Air Diffusion System

Supply, Installation, testing and commissioning 2 Nos. twin type rotary air blowers capable of delivering approx. 200-220 cum/hr of free air at 0.5 kg/cm² (one working & one standby), driven through "V" belt or directly coupled through flexible coupling to a TEFC motor of suitable HP Suitable for 415 ± 10% volts, 1450 rpm, 3 phase, 50 cycles A/C supply.

29.2.7 Air Piping

Air piping shall comprise of droppers and laterals (submerged in SS 304) connected with M S (epoxy coated) Header complete with all fittings such as tees, crosses, plugs, sockets, elbows, reducers, supports & clamps, puddle flanges etc. cutting chases & making good.

29.2.8 Air Dispersion System

Non clog tubular type air dispersion system capable of handling 3-4 cfm of air with oxygen transfer with efficiency of 3-4% per meter water depth. Air dispersion grid in SS shall be assembled in modular form so that they can be replaced/repared easily from platform at the top (fine bubble membrane diffusers)

Fine bubble diffusers in MBBR Tank, Coarse bubble diffusers in equalisation tank and Sludge holding tank.

- a) For equalization tank -1 No. (Disc type Coarse bubble diffusers)
- b) For sludge holding tank - 1 No. (Disc type Coarse bubble diffusers)
- c) Moving Bed Bio-media Reactor - 2 Nos. (Tubular type Fine bubble diffusers, 600/1000 mm long)
- d) Bronze Ball Valve and air dispersion grid as required for STP as described above

29.2.9 Pipe Line

Providing and fixing plant room piping (as described below) and isolation control valves for making the system complete.

MS Epoxy: Air piping from blower and header to tanks.

PVC piping: Pumped effluent & tank overflow pipe line

29.2.10 Floating Media

Supply, installation, testing and commissioning of PVC floating media to be installed in Moving Bed Bio- Reactor - 2Nos. and PVC tube deck settling media to be installed in Secondary Settling Tank for 200 KLD.

29.2.11 Anoxic Tank recirculation pumps

Supply, installation, testing and commissioning centrifugal Monoblock Anoxic Tank recirculation pumps. Quantity: 2 Nos (1 working & 1 stand by).

(Solid handling size for this pump shall be 7.0 mm).

Flow rate (each) = 20 m³ / hr,

Head = 8-10 Mtr Power as required

29.2.12 Submersible Mixer

Supply, installation, testing and commissioning submersible Mixer in Anoxic tank for 200 kld daily sewage flow (approx. 1.5 H.P. or as required)

29.2.13 Flow Meter

Providing fixing testing and commissioning of inline flange mounted electromagnetic flow meter with IP 65 Protection, full base rubber liners, SS 316, electrodes, SS 304 /MS coil housing, ± 0.5% linearity, 24 VDC / 90-250 V, AC 50 HZ, 0 to 55 degree Celsius as per model

selection, suitable for sewage water including all fittings and accessories complete with bypass arrangement suitable for the required flow rate.

29.2.14 PH Meter

Providing fixing testing and commissioning of field/panel mounted pH meter with ABS weather proof IP 65 enclosure, LED indication for high and low pH $\pm 2\%$ accuracy front keyboard calibration / set point settings.
pH Range: 0-14.

29.2.15 Filter feed

Providing and fixing single/ multi stage, monobloc vertical / horizontal pumping set with delivery casing and motor body in cast iron, pump shaft and impeller in stainless steel AISI 304, mechanical seal coupled to a TEFC electric motor, 2900 RPM. Each pump should be operated to a curve required by the operating conditions connected to a TEFC induction motor suitable for 400/440 volts, 3 phase 50 cycles A.C. supply having IP 55 protection enclosure, vibration eliminating pads etc. complete with base and frame, nuts and bolts as per requirement and as per instructions.
(Motors efficiency class shall be IE 3)

Filter Feed Pumps

Capacity: 14 M3/hr.

Head: 25-30 M

No. of Pumps (1 working + 1standby)

Note - Operation of pump shall be based on level controller proposed to be installed in tank as per site location. The contractor to ascertain the Head required for pumps as per site conditions and provide accordingly.

29.2.16 Filter Media

Supplying, installing, testing and commissioning of FRP lined MS vessel filter with frontal piping and associated valves and accessories. Filter shall be suitable for minimum working pressure of 5 kg / cm² and shall include media, standard fittings like pressure.

Multigrade pressure sand filter media

Flow rate: 14 cum/hr

Filtration velocity: 15 cum/hr/sqm

Shell/Disc thickness: 6/8 mm

Filter Diameter: 1100 mm.

Activated Carbon Filter

Flow Rate: 14 cum/hr

Filtration velocity: 12.5 cum/hr/sqm

Shell/Disc thickness: 8/10 mm

Filter Diameter: 1200 mm

Note - Contractor may be asked to alter the number of filters and pumps subject to any revision to meet the desired capacities.

29.2.17 UV Disinfection System

Supply, installation, testing & commissioning of U.V. disinfection system for treated waste water suitable for a flow rate of 14 cum/ hr. approx. 8 nos. of UV lamps, Approx. Power 940 Watt, MPN count less than 1 per 100 ml.

29.2.18 Ultra Filtration System

Supplying, installing, testing & commissioning PLC based Ultra-filtration System (UF) of Capacity 200 KLD, electro-mechanical system (including Civil construction)

Providing and fixing single/ multi stage, monobloc vertical / horizontal pumping set with delivery casing and motor body in cast iron, pump shaft and impeller in stainless steel

AISI 304, mechanical seal coupled to a TEFC electric motor, 2900 RPM. Each pump should be operated to a curve required by the operating conditions connected to a TEFC induction motor suitable for 400/440 volts, 3 phase 50 cycles A.C. supply having IP 55 protection enclosure, vibration eliminating pads etc. complete with base and frame, nuts and bolts as per requirement and as per instructions.
(Motors efficiency class shall be IE 3)

Ultra Filtration Feed Pumps

Flow Rate: 14 cum/hr

Head: 25-30 M

Each Set No. of Pumps 2 (1 working + 1 standby)

Ultra Filtration Back Wash Pumps

capacity: 25 cum/hr

Head: 25-30 M

Each Set No. of Pumps 2 (1working+1standby)

Ultra Filtration Unit with MSEP Skid with Electric Control Panel for UF with PLC control

Capacity: 14 M³/Hr

No. of Membrane: as per manufacturer (Flux should not be more than 40 Ltr/ sqm/hr)

Skid: 1 No.

Chemical cleaning system for cleaning the membranes comprising of at least one SS pump of required capacity (approx. 14,000 lph) at 20 mwc, CIP tank in HDPE of required capacity with interconnecting pipe work, dosing pump, Valves and on-line micron filter of 14,000 lph capacity in SS 316 construction. All accessories / allied equipment to be included to complete the CIP system.

29.2.19 Filter Press

Supply, installation, testing and commissioning of Filter Press of plate size 18"x 18"x 15 nos plate (or as required) with screw feed pumps for required capacity (1Working+1Standby), with interconnecting piping and poly dosing system all complete.

29.2.20 Flushing, Garden Irrigation and excess treated sewage water transfer pumps to Main Grid.

Providing and fixing single/ multi stage, monobloc vertical / horizontal pumping set with delivery casing and motor body in cast iron, pump shaft and impeller in stainless steel AISI 304, mechanical seal coupled to a TEFC electric motor, 2900 RPM. Each pump should be operated to a curve required by the operating conditions connected to a TEFC induction motor suitable for 400/440 volts, 3 phase 50 cycles A.C. supply having IP 55 protection enclosure, vibration eliminating pads etc. complete with base and frame, nuts and bolts as per requirement and as per instructions.
(Motors efficiency class shall be IE 3)

Flushing & Garden Irrigation recycled water transfer pumps to Main Grid.

Capacity 18.25 cum/hr (Each)

Head 43 m

Power: 5.5 KW / 7.5 HP or **as required**

Each set No. of pumps: Two (one Working and one Standby)

29.3 Electrical Installation

Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of motor control center fabricated out of 14-gauge CRCA sheet steel. Cable gland plates shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anticorrosive process before painting as per specifications with 2 coats of red oxide primer and final approved shade of powder coated paint. 2 Nos. earthing terminals shall be provided for 3 phases, 4 wire, 50 Hz supply system. Lifting hooks shall also be provided in case of large panels. Approval shall be taken for each panel before fabrication. Quoted rates shall be inclusive of cables (in accordance to specification) with earthing from panel to each motor / equipment.

Incoming

200 amps TPN MCCB with the following accessories:

- a. 0-500 volts 96 x 96 mm square electronic voltmeter with selector switch shall be protected by 2 amps TP MCB. 1 Set
- b. 0-100 amps 96 x 96 mm square electronic ammeter with selector switch and 100. /5 amps 10 VA CL:1 CTs. 1 Set
- c. Phase indicating lamps shall be protected by 2-amp SP MCB 3 Sets

Bus Bar

- d. 200 amps TPN (15 KA) copper bus bar with heat shrinkable insulation sleeves.
- e. Required Nos of required capacity TPN MCB for direct on-line starter/star delta starters and outgoing feeders to all the pumps/blowers etc. (including standbys). Each compartment shall contain auto / manual selector switch and indicating lamp with MCB's for 'ON/OFF/TRIP' status of motor.
- f. Spare MCB's of required rating for all motors / equipment's to be installed in phase II and the following in addition as spare:
 - g. 32 amps TPN MCB's 2 Nos.
 - h. 16 amps TPN MCB's 2 Nos.
 - i. 1 No. 40 Amp TPN MCB's in control panel for supply to variable speed hydropneumatics systems.
- j. Necessary cable alleys, internal / cabling, wiring, cabling from MCC to various pumps / equipment and interlocking, earthing for all equipment shall also be included
Note: a) All MCCBs/MCBs shall be of 15 KA breaking capacity and suitable for motor duty application.
 - b) All motor starters shall be provided with Automatic level controller
 - c) DOL starters shall be used for motors below 10HP and Star-Delta Starters for other motors.
 - d) Provision shall be made for providing potential free contacts to all pump's starters.
 - e) Digital type energy meter with set of current transformers of suitable rating, Accuracy class 0.5.

29.4 Civil Works

29.4.1 Structure Stability

The agency has to ensure the structure is completely stable. In case any strengthening work is required, the has to be carried out by submitting strengthening schedule. Also, complete injection grouting work has to be carried out by following:

- a. Providing and inserting 12mm dia galvanised steel injection nipple in honey comb area and along crack line including drilling of holes of required diameter (20mm to 30mm) up to depth from 30mm to 80mm at required spacing and making the hole & crack dust free by blowing compressed air, sealing the distance between injection nipple with approved Epoxy injection grout in concrete/RCC work in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/ masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc.

29.4.2 Tiling work

Complete wall & floor tiling work shall be done in all the tanks of the STP (full height) as well on all the walls including corridor upto an appropriate height with ceramic glazed tiles conforming to IS: 15622 laid in cement mortar with mixing of water proof compound in proportions approved by the manufacturer. Grouting shall be done with matching pigment with white cement. This shall also include the dismantling of existing plaster and repairing wherever required.

29.4.3 Painting

- a) All the walls except the tiling area shall be properly painted with epoxy paint by scrapping the existing surface, preparation of surface, priming coat, and two or more coats of the epoxy paint as per the manufacturer's specification.
- b) The water supply pipes shall be painted with epoxy paint by preparation of surface, priming coat, and two or more coats of the epoxy paint as per the manufacturer's specification.

c) All the MS structure including media tanks, gate, chowkhat or any other structure shall be painted with epoxy paint by preparation of surface, priming coat, and two or more coats of the epoxy paint as per the manufacturer's specification

29.4.4 Flooring work

The flooring of the STP area including corridor, stairs except the tanks shall be laid with kota of 25mm thick laid over cement mortar of required thickness and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete.

29.4.5 Drainage work

The agency shall ensure proper drainage inside the STP in case of Monsoon to avoid flooding the STP, Masonry Manhole with RCC/ CI covers shall be provided around the STP with bypass provision.

29.4.6 Pipeline work

All the internal piping work shall be replaced with non-corrugated material to avoid corrugation and shall be durable to withstand pressure. The material of the pipe shall be submitted for approval of the competent authority. All the types of valves/stopcock shall be replaced.

29.4.6 Ventilation

The agency shall plan the STP ensuring proper ventilation inside the STP. Ensuring the supply of fresh air to maintain a safe working environment. Removing harmful gases to reduce health risks. Maintaining proper airflow to optimize the treatment process and prevent stagnation of air within enclosed spaces. Preventing the buildup of odors and controlling air quality within the STP premises.

The agency shall submit a detailed layout of the ventilation system that ensures proper air distribution across all critical areas, including sludge handling rooms, aeration tanks, filtration units, and other enclosed spaces. Choose appropriate fans, blowers, air filters, and exhaust systems based on the specific needs of the facility. Ensure all equipment is durable, energy-efficient, and capable of handling high humidity and corrosive environments. Design exhaust systems to safely expel harmful gases and introduce fresh air where required.

29.5 STATUTORY APPROVALS:

The required statutory approvals from all authorities shall be obtained by the Contractor at his own cost. Official Statutory fees, if any, shall be paid to the concerned department/authority directly by THSTI.

29.6 TESTING, COMMISSIONING AND VALIDATION

- a) After completion of the construction and installation works, all the pumps, filter and services shall be commissioned and tested to check the operation and performance of the system.
- b) Before start of the validation process, the Contractor shall submit a detailed validation document giving details of validation checks and tests to be performed, the acceptance criteria as per the approved designs and drawings and the formats for recording the check and test results.
- c) After completion of the validation process, the Contractor shall compile the validation results and submit to THSTI.
- d) The Contractor shall provide all the test and measuring instruments, tools, tackles, manpower etc. required for the Testing, Commissioning and Validation Process of STP.

29.7 DOCUMENTS AND DETAILS TO BE SUBMITTED ON COMPLETION

- a) On Completion of the works, the Contractor shall submit the following documents to THSTI in three sets:
 - Complete three sets of 'AS BUILT DRAWINGS'
 - Operation and Maintenance Instructions & Manuals for individual pump and Systems.

- Recommended List of Spares and Consumables.
 - Preventive Servicing and Maintenance Schedule.
- b) The Contractor shall submit the Technical Specifications and Data sheet for all the pump/s and systems supplied and installed.
- c) The Contractor shall submit the warranty/guarantee card of all the pumps/ system, and written undertaking that spares and after sales services for all the pumps, systems and services installed in the STP shall be made available for a period of at least five years from the date of handing over the facility. The after sales services may be availed by the Employer from the executing Contractor under a separate Operation and Maintenance Contract.

SCHEDULE OF APPROVED MAKES AND MANUFACTURERS

SN	ITEM	APPROVED MAKE
1	Submersible Sump Pumps in equalization tank	KSB / kirlosakr/BHEL/ eqv.
2	Plant room sump pump	KSB / kirlosakr/ eqv.
3	Centrifugal Monoblock self-priming Sludge Transfer pumps tank	KSB / kirlosakr/ eqv.
4	twin type rotary air blowers	Usha/ Beta / Kay /Everest / or equivalent
5	PVC floating media to be installed in Moving Bed Bio- Reactor and PVC tube deck settling media	M.M. Aqua / Cool Deck
6	centrifugal monoblock Anoxic Tank recirculation pumps	KSB / kirlosakr/ eqv.
7	submersible Mixer in Anoxic tank	ABS / Aqua Italy/Toshio
8	Filter Feed Pumps	Kirloskar / Mather+Platt / Lubi
9	U.V. disinfection system	Alfa UV Model or eqv.
10	Ultra Filtration Feed Pumps	Kirloskar / Mather+Platt / Lubi.
11	Ultra Filtration Back Wash Pumps	Kirloskar / Mather+Platt / Lubi.
12	Membrane	Hydromantic/Uniqlo / GE/QUA / HYDRAMEM (5 module membrane)
13	Filter Press Pump	UT
14	Filter Press	Pharmatech/Eqv.
15	water transfer pumps	Kirloskar / Mather+Platt / Lubi
16	Electrical Panel, MCCB, Bus Bar, MCB, wiring, starter	L&T / ABB/ Schnieder/ eqv.
17	Cement	Ultratech/ ACC/ JK Cement or Eqv
18	Tiles	Kajaria/ Somany or Eq
19	Epoxy Grout	Saint Gobain / Asian or Eq
20	Epoxy paint	Asian, Berger, Nerolac or eq
21	Valves / stopcock	Zoloto / Audco / L&T or eqv

Note: - The Contractor shall procure and provide all the materials from the manufacturers / suppliers as per the above list attached with the tender documents, as per the item description and particular specifications for the work. The equivalent brand for any item shall be permitted to be used in the work, only when the specified make is not available. This is, however, subject to documentary evidence produced by the contractor for non-availability of the brand specified and also subject to independent verification by the Engineer-in-Charge. In exceptional cases, where such approval is required, the decision of Engineer-in-Charge as regards equivalent make of the material shall be final and binding on the Contractor. Nothing extra shall be payable on this account.

CHECKLIST FOR SUBMISSION OF TECHNICAL PROPOSAL & COMPLIANCE

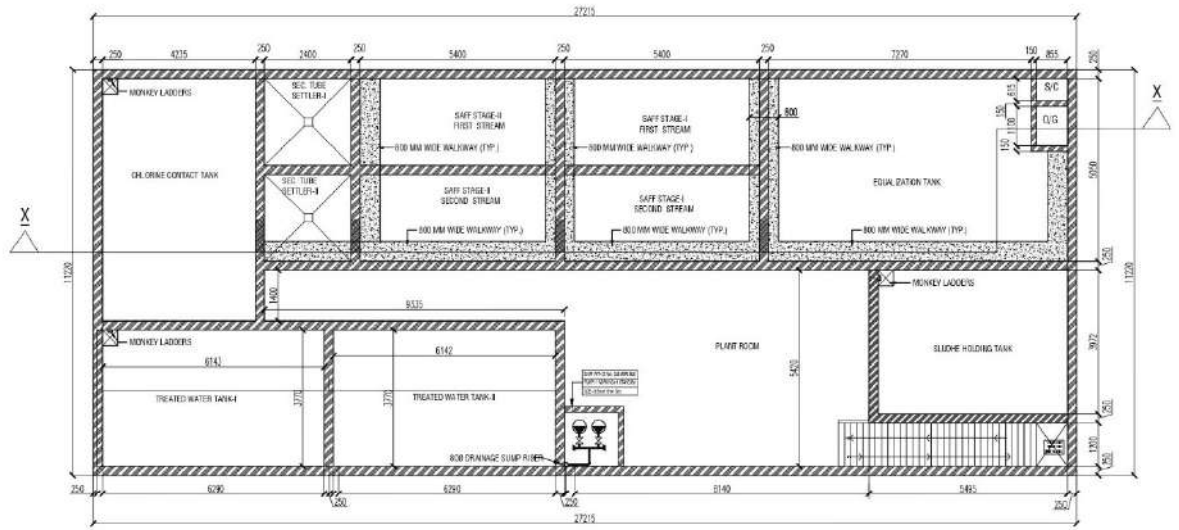
The Bidder shall submit the technical proposal and details for the offered item / equipment along with supporting details like drawings, catalogues and brochures in support of compliance.

	Item of Work	Proposed Make/model	Offered Specification w.r.t. Tender	Supporting Documents Submitted (Catalogue/drawing/brochure)	Reference where similar item/equipment is supplied and installed by the Contractor

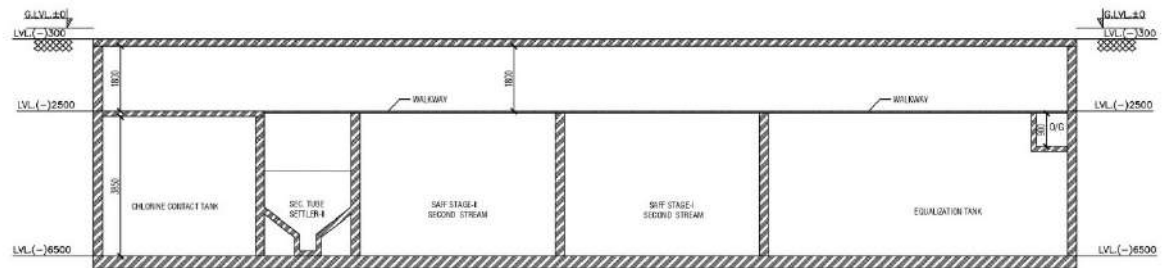
PROFORMA OF PRICE BID

Sl. No.	Item Description	Quantity	Units	RATE	AMOUNT
1	Expansion and Modification of the Existing Sewerage Treatment Plant of 200 KLD capacity at NCR Biotech Science Cluster, Faridabad (200KLD) Including Designing, Dismantling of Internal Electromechanical Setup, Retrofitting, wall tilling & Ventilation system of the STP. Civil Structure, Design, Supply, Installation, Testing, and Commissioning of the Sewage Treatment Plant (STP) on MBBR Technology, The scope under the contract shall cover and include the following works but not limited to be executed by the Contractor on 'Turnkey Basis': - 1.Dismantling of electromechanical existing installation and making bypass arrangement of STP water while construction is in progress. 2.Retrofitting of existing civil structure, water proofing, tilling of internal tanks, making foundation of all pumps and motors as per approved design /drawings. 3.Design, supply, installation testing & commissioning of 200KLD (2X100) STP based on MBBR technology, including all the equipment required for the sewage treatment plant Complete in all aspects or as approved in design by engineer in charge/committee members. 4.Contractor will design STP with proper ventilation for the entire STP and suggest that if any modification is required in the civil structure for the ventilation, any work required for modification is in the scope of the contractor. 5.All electrical wiring cabling panels are in the scope of work. THSTI will provide source for the connection whatever cabling or switchgear required for the connection will be in the scope of contractor. 6. The design must fully comply with all applicable norms and guidelines set by local authorities, the Central Pollution Control Board (CPCB), and the Environmental Impact Assessment (EIA). The contractor must ensure that the plant is not only technically sound but also meets all statutory and regulatory environmental standards.	1.00	Nos		
		Total including GST			0.00

TENDER DRAWING



SEWAGE TREATMENT PLANT (PLAN)



SEWAGE TREATMENT PLANT (SECTION = X - X)