



GOVERNMENT OF WEST BENGAL
OFFICE OF THE SUPERINTENDING ENGINEER
SOUTH CIRCLE
MUNICIPAL ENGINEERING DIRECTORATE
MUNICIPAL AFFAIRS DEPARTMENT

Kausallya, Opposite Kausallya T.O.P., Kharagpur, Dist-Paschim
Medinipore, Email ID : se_southmed@rediffmail.com

NOTICE INVITING e-BID

Memo No. MED/SE(S)/344 /W-6/06 Pt. II

Dated-16/10/2023

**Notice Inviting e-Bid No.- WBMAD/NIQ-03/SE(S)/2023-24(2nd
Call)**

The Superintending Engineer, South Circle, M.E.Dte invites sealed competitive Tender on turnkey basis from a reliable and resourceful Companies/Firms/Contractors having experience and acumen in construction work as noted below and the eligibility is depicted here under for participating in the e-Bid.

1. Name of Work: Surveying, Geo-Technical investigation, Planning, Designing, Construction of 17.21 MLD Capacity conventional type Surface Water Treatment Plant (Approx. -865M³/hr.) (20 hours operation) With tolerance of 25% over loading & with necessary civil, electrical (according to I/E rules), along with 2.10 ML Capacity Clear Water Reservoir (at 0.50 meter above H.F.L.) Cum Pumping Station and 630 KVA Electrical H.T. Sub-Station including (construction of administrative building consist of accommodating office, laboratory room, SCADA room, conference room, staff room, chemical house, guard room etc) along with land filling, boundary wall, internal road,

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surface drain retaining wall, surface drain & all other allied works (Civil & Electromechanical work & others, if any) at Tamluk (including 3 months trial run and necessary training of maintenance staff & thereafter (subsequently) 5 (Five) years operation and maintenance of the Plant on turnkey basis under AMRUT-2.0.

2. Location of the work: At Mouza- D.C. Sankarara , JL No-286, PLOT No-1500, 1501,1502,1503,1504,1507 and 1785

3. Brief Scope of Work:

i) Surveying, Geo-Technical investigation, Planning, Designing, Construction of 17.21 MLD Capacity conventional type Surface Water Treatment Plant (Approx. -865 M³/hr.) (20 hours operation) With tolerance of 25% over loading & with necessary civil, electrical (according to I/E rules), along with 2.10 ML Capacity Clear Water Reservoir (at 0.50 meter above H.F.L.) Cum Pumping Station and 630 KVA Electrical H.T. Sub-Station including (construction of administrative building consist of accommodating office, laboratory room, SCADA room, conference room, staff room, chemical house, guard room etc) along with land filling, boundary wall, internal road , surface drain retaining wall, surface drain & all other allied works (Civil & Electromechanical work & others, if any) at Tamluk (including 3 months trial run and necessary training of maintenance staff & thereafter (subsequently) 5 (Five) years operation and maintenance of the Plant on turnkey basis under AMRUT-2.0.

Preamble:

It is desired to strengthen and improve its existing water supply system by creating intake work, water treatment plant, storages, transmission &

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distribution expansion as well as repair & strengthening of existing assets. Various works indentified under this proposed improvement programme have been prioritised. These priority works have now been approved under AMRUT 2.0. The scope of work for the works covered under the present tender is as follows:

A. Conventional type Surface Water Treatment Plant (WTP)

It is essential to collect data regarding High Flood Level, High Tide Level, Low Water Level from appropriate authority. The perspective bidder should collect these data in his own arrangement from Irrigation Department Govt of West Bengal.

- i) Topographic survey of the plot with block contouring at 5 m X 5 m grid.
- ii) Geo-technical investigation (trial bore)
- iii) Contractor shall design, construct, including all supply & installation of electro-mechanical and instrumentation equipments a water treatment plant (WTP) of 17.21 MLD capacity as per the BOQ and as per the detailed specifications. It shall also include recirculation of waste from clari-flocculator and back wash water from the rapid sand filters including sludge treatment and disposal as per the specification. It shall also include design, supply and installation of all corresponding mechanical equipments. The contractor has to design process of water treatment, hydraulic sizing of various components of the treatment plant, RCC design of these components, design of mechanical equipments. All these designs shall be prepared and shall be got approved from IIT / NIT / Govt Engineering College.
- iv) Hydraulic testing of components, trial run & commissioning

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- v) 3 months trial run and necessary training of maintenance staff & thereafter (subsequently) 5 (five) years operation and maintenance of the Plant)

(B) 2.10 ML CLEAR WATER UGR:

- i) Topographic survey of the plot with block contouring at 5 m X 5 m grid.
- ii) Geo-technical investigation (trial bore)
- iii) The contractor has to design the RCC structure of the Clear Water Reservoir and the detailed RCC design has to be prepared and shall be got approved from IIT / NIT / Govt Engineering College.
- iv) The necessary inlet, outlet, overflow and washout pipes with valves and madeconnection with Pipe Network.
- v) Hydraulic testing of components, trial run & commissioning
- vi) 3 months trial run and necessary training of maintenance staff & thereafter (subsequently) 5 (five) years operation and maintenance of the Plant)

(C) 2.10 ML CLEAR WATER PUMPING STATION:

The total capacity of the pumping station will be 865 cubic meter per hr. at a designed head to be provided by the bidder with simultaneous operation of pumps (2 (Two) Working ,1 (One)Standby.) Running hours of 20 Hrs/day would yield to a supply of 17.21MLD minimum as per requirement. One pump will be kept stand by at any point of time. The pump delivery line with common delivery manifold should be equipped with actuator operated Butterfly valves, valve chamber, blank-flange if necessary (detail of which is given in Technical Specification). The minimum length of delivery manifold should be as per detail technical

specification. All the design of the pipelines should be such that to ensure streamline flow to get accurate flow measurement.

(D). Sub-Station Building

The total sub-station shall comprise mainly five basic sections such as, WBSEDCL Supply Room, 11 KV H.T. Switchgear Room, space for two(2) number indoor Transformers, L.T. PCC room, operator's room and toilet. The toilet area required for the sub-station shall be as per design requirement in accordance to electricity rules. Sub Station Building (Not less than 200 sqm area or as designed) along with all electro mechanical works.

(E). Boundary Wall :

- i) The offer should include required boundary wall (2.1 M height from EGL)
- ii) The offer also includes 5 M wide gate & security staff office cum sitting arrangement at the entrance.

(F). Land Development work

It is essential to collect data regarding High Flood Level, High Tide Level, Low Water Level from appropriate authority. The perspective bidder should collect these data in his own arrangement.

The proposed ground level will be +0.30 M of the HFL(High Flood Level).

Proposed level of all approach roads should be 150mm above HFL. So necessary land development cost should include in rate.

(G). Bank Protection & Retaining wall:

- i) The offer rate should include necessary cost of construction of retaining wall as well as cost of construction of bank protection work.

(H) Installation of Chlorination Arrangement:

- i) The offered rate should include necessary cost of construction of Chlorination arrangement.

(I) Administrative Building:

The offered rate should include necessary cost of construction of the following accommodation.

- i) Chemical House

- ii) Staff Quarter
- iii) SCADA room
- iv) Laboratory Room
- v) Conference Room
- vi) Guard Room

Detail are given below.

1. Administrative building is same as ANNEX Building in which minimum carpet area of 200 sqm. .
2. Staff Quarter shall be two storied building and each floor area shall be 100 sq. m. The building consists of 2 (two) nos. Bed Rooms, 1(one) no. Drawing/Dining Room, 1(one) no. Kitchen, 2(two) nos. Toilets and 1(one) Balcony in each floor.
3. SCADA room / Central control room for the plant is already mentioned in the 1st floor of the Annex Building .
4. Laboratory Room shall be provided in the Chemical House.
5. Conference Room is situated in Ground floor of Annex Building in the name of "main entrance hall" .
6. Guard Room shall be single storied building of which room size 2.5 m x 2.5m minimum.
7. One number 15 sqm. Stair case to be provided in Administrative Building. /Annex Building
8. Water for utility of ANNEX Building and CHEMICAL house etc. shall be taken from Filter Back Wash Tank.

(J) Internal Road & Surface Drain:

The offered rate should include necessary cost of construction of the internal road with paver block finishing & Surface drain should be of approved design & drawing

(K). Electrical installation and instrumentation system at proposed WTP -

1. Design, provide, supply, and install the electrical equipments and instrumentation equipment at proposed WTP as per the BOQ and as per the detailed specifications
2. Testing & commissioning

(L). Operation and maintenance of water treatment plant

1. Carryout SCADA Based Comprehensive O & M of the proposed WTP at DC Sankarara for a period of 5 years from the date of successful commissioning of WTP
2. Provide adequate skilled and experience manpower to operate the WTP and Head work on SCADA on 24x7 basis and achieve desire consistency in operation and result.
3. Checking, inspecting, tightening / cleaning of all equipments, pipe & valves in premises, panels, maintaining the software of SCADA.
4. Up keeping and maintaining the buildings / structures (civil, structural, electrical, plumbing and firefighting) and the surrounding to ensure cleanliness & hygiene.
5. Repair / retrofit / replace the malfunctioning units / equipments / wires & cables so that the functioning and operation of the WTP.
6. Maintain sufficient stock of spares parts of equipments / Machineries at the WTP
7. Provide and supply and ensure availability of the tools and tackles at the WTP
8. Provide monthly progress reports to the Engineer-in-charge
9. After the successful completion of the O & M period, jointly inspect the premises / equipments with the Engineer-in-charge, attend to the observations made the Engineer-in-charge.
10. Energy Charges and RAW Water charges will be born by Tamralipta Municipality.
11. Providing 1 no's of laptop with i-7 Intel Processor, 8 GB RAM and 500 GB SSD and 1 no's of laptop with i-7 Intel Processor, 12 GB RAM and 1TB SSD with all windows software are license version. And Printer cum Scanner 1 set.
12. Desilting and cleaning the Raw Water Channel, Raw Water Sump, to Maintain 24X7 Smoothly Water supply to Public
13. If water Supply Interrupted due to negligence of contractor, Penalty will be decide and imposed by Municipality which will legally binding to contractor.
14. Carryout O & M of the proposed executed pipelines for a period of 5 year from the date of successfully commissioning of WTP.

** It is to be noted that the WTP Pump House should be designed to accommodate machineries to withdraw 21.26 MLD Raw Water in 22 Hrs pumping (For future provision). But for now Pumping machineries need to be designed & installed to obtain 17.21 MLD Discharge in 22 Hrs pumping.*

4. Eligibility to participate in the Bid:

Having experience and technical acumen in Executing, Construction & Completion of

- i) A Surface Water Treatment Plant of 5.12 MLD or above capacity along with construction of 0.63 ML Clear water Reservoir with 250 KVA substation including all Civil, Electrical & Electro-mechanical works complete in all respect with operation & maintenance successfully for at least 24(twenty) months in any contracts during last Five financial years in any Govt. Dept. /Board/ Semi Govt. /Corporation/ Statutory Authority/ Undertaking etc. under single contract.

OR

- i) Having experience and technical acumen in Executing, 2 (two) Nos Surface Water Treatment Plant of 4.3MLD or above capacity along with construction of 0.52 ML Clear water Reservoir with 250 KVA substation for each including all Civil, Electrical & Electro-mechanical complete in all respect with operation & maintenance successfully for at least 18(Eighteen) months in any contracts during last Five financial years in any Govt. Dept. /Board/ Semi Govt. /Corporation/ Statutory Authority/ Undertaking etc. under single contract.

OR

Construction & Completion by 75% of a Surface Water Treatment Plant and capacity of which will be at least 5.12 MLD after completion along Completion by 75% capacity of 0.63 ML or above capacity CWR and substation of 250 KVA including all civil, Electrical and Mechanical Works in any contracts during last Five financial years in any Govt. Dept./Board/Semi-Govt./Corporation/Statutory Authority /Undertaking etc. under single contract

AND

The available Bid capacity (to be calculated on the basis of prescribed format) of the prospective applicant shall not be less than that of the quoted amount as per **Annexure-A** in terms of memorandum no- 45-W(C)/1M-23/15 Dated- 13.02.2015 of Principal Secretary Public works Department, works Branch, Govt. of West Bengal

AND

Having qualified technical personnel (to be employed under the firm for at least 2 consecutive years) with sound knowledge and experience in execution of similar nature of works.

AND

Having valid electrical license with electrical Supervisor, GST, P. Tax Clearance Certificates, PAN Card, P.F., & E.S.I Registration Certificate etc

Note: Producing P.F. & E.S.I Registration with bid proposal is not Mandatory however successful bidder have to produce said certificates before agreement.

Note: Only works completed successfully will be treated as credential. Joint venture, Consortiums etc are not allowed.

A certificate from the executing authority/ client not below the rank of Executive Engineer/ Divisional Engineer/ equivalent is to be produced in

support of above criteria clearly stating that the works entrusted to the bidder have been successfully completed.

Each work must have been executed by the bidder successfully under a single contract within the last 5 (Five) years as prime Contractor anywhere in India in drinking water supply project with State or Central Government / Govt. Autonomous body.

Machinery & Equipment

Having in possession of Sophisticated & Modern Equipment, Machineries etc. for construction specially required for Water Treatment Plant. The bidder must submitted proof of ownership or copy of lease agreement with bid document.

Technical Personnel

Having full time qualified salaried technical personnel with sound knowledge & experience in execution of similar works. The following personnel are

1. Civil Engineer (Degree holders with min. 3 Yrs. of experience in construction field): 1 no.
2. Mechanical Engineer (Degree holders with min. 3 yrs. of experience in similar field): 1 no.
3. Electrical Engineer (Degree holders with min. 3 yrs. of experience in similar field): 1 no.
4. Civil Engineer (Diploma holders with min. 3 Yrs. of experience in construction field): 1 no.

5. Mechanical Engineer (Diploma holders with min. 3 yrs. of experience in similar field): 1 no.
6. Electrical Engineer (Diploma holders with min. 3 yrs. of experience in similar field): 1 no.
7. Licensed Electrician & Electrical Supervisor having certification of 11 KV HT line: 1 no.
8. Environment Engineer (BE/B.TECH/Chemist/B.Sc Chemistry (Hons) with minimum 2 years experience-1 no.
9. Provide adequate skilled and experience manpower to operate the WTP on SCADA on 24x7 basis and achieve desired consistency in operation and result.

Note: The bidder must submit the relevant document in proof of employment along with educational qualification & experience.

Declaration

The bidder should not have a history of any penal measures taken by any authority/ client on any account against the organization / firm for any project of similar nature or any other project executed during the last 3 (three) years. A declaration to this effect will have to be submitted by the bidder in A4 the form of Affidavit in non-judicial stamp paper duly certified by 1st class Judicial Magistrate. Without submission of this document the bidder will be disqualified.

5. **Financial Criteria:**
 - i) Completion certificate produced as credential should clearly indicate the description of works, value of contract, executed work value, date of

award, actual date of completion etc. and name, address, telephone no. of the client.

- ii) The Bidder should have Annual Turnover during any of the last 5 (five) financial years (i.e. 2018-2019, 2019-2020, 2020-21, 2021-22 & 2022-23) is not less than Rs. 9.00 Crore (Rupees Nine Crore) " (General Notes:-The average annual turnover shall be based on Tax Audited Report in 3CB Form duly signed by a registered chartered accountant of immediate proceeding last 5 (five) financial years authenticated by UDIN.)
- iii) The Bidder should have a valid Trade License/Registration Certificate, Professional Tax Challan, PAN Card, GST Registration Certificate & GSTIN No.
- iv) Bidder should submit Banker's certificate having Solvency of at least Rs 10.00 Crores (TenCrores) only from a nationalized/scheduled bank of India. Issue date of the certificate must be after date of publication of the tender.

All documents in original to be produced in due course of time as & when asked by the Tender

6. Earnest Money:

(a) The intending bidders shall have to deposit Earnest Money in the following manner Initial earnest money of Rs. 15.00 Lakh to be submitted online through ICICI bank gateway linked with the e-tender website as an initial Earnest Money.

Deposit shall accompany with Bid Proposal, in the form of The Earnest Money, as specified in this NleB. Bid will be declared informal if earnest money receipt is not submitted and uploaded with bid document.

(as per GO No. 3975-F(Y) dt. 28.07.2016 of Finance Deptt., Govt. Of West Bengal). Every such Transfer shall be done on or after the date of publish of NleB. Any Bid without such Transfer of EM (Except exemption as per G.O.) shall be treated as informal and shall be automatically cancelled. Online transfer of Earnest Money receipt (Scanned copy) shall be uploaded as Statutory document.

The amount will be converted into security deposit.

b) Balance Earnest Money Deposit i.e. 2% of bid amount beyond Rs. 15,00,000.00 (if any) shall have to be deposited after acceptance of Bid Proposal in the form of Demand Draft from any nationalized/scheduled Bank in favour of the Executive Engineer, East Midnapore Division, M.E. Dte Payable at Tamluk.

7. Date and Time Schedule :-

| Sl. No. | Particulars | Date and Time |
|---------|-------------|---------------|
|---------|-------------|---------------|

| | | |
|----|--|----------------------------------|
| a) | Date of uploading of NIB (Bid Documents)(online) (Publishing date) | 16/10/2023 at 5:00 PM |
| b) | Document download start date (online) | 16/10/2023 from 5:30 PM onwards. |
| c) | Date of Pre Bid Meeting (offline) with the intending Bidders in the office of the Superintending Engineer, South Circle, Municipal Engineering Directorate, Kharagpur. | 03/11/2023 at 1:00 P.M |
| d) | Both Technical and financial bid submission starting date (On line) | 17/10/2023 10:00 A.M onwards |
| e) | Last date of submission of queries (To be reached at SE (South Circle) | 03/11/2023 up to 1:00 P.M |
| f) | Document download closing date (online) | 17/11/2023 up to 5:00 P.M |
| g) | Both Technical and financial bid submission (on line) closing date | 17/11/2023 up to 5:00 P.M |
| h) | Date of opening of Technical Proposals(online) | 21/11/2023 after 11:00 A.M |
| i) | Date of uploading of list of technically qualified bidders (online) | Will be informed later |
| j) | Date of opening of financial bid (online) | Will be informed later |
| K) | Date of uploading of list of bidders along with the rates through (online), also if necessary for further negotiation through (offline) for final rate. | Will be informed later |

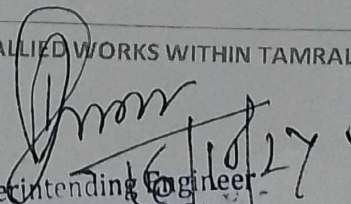
8. Time of completion

Time of completion of the Contract is 18months from the date of issuance of Work Order.

9. Site inspection & general information

Intending Bidders are required to inspect the site of the Project with particular reference to location and infrastructure facilities. They are to make a careful study with regard to availability of materials and their sources and all relevant factors as might affect their rates and prices. They are also acquainted with relevant IS specifications, CPHEEO manuals, Clauses

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 Superintending Engineer
 South Circle, M.E. Deptt.,
 Deptt. of U.D. & M.A.,
 Govt. of West Bengal.