### GOVERNMENT OF WEST BENGAL

OFFICE OF THE SUPERINTENDING ENGINEER, WEST CIRCLE
MUNICIPAL ENGINEERING DIRECTORATE
PATAL BAZAR, 3RD FLOOR, TINKONIA
PURBA BARDHAMAN, PIN:-713101

E-mail-sewestmed@yahoo.com



Dated: 17.01.2025

Memo No:-MED/SE(W)/782/W-278/2024

#### **NOTICE INVITING e-TENDER**

### Notice Inviting e-Tender No: 24 of SE (WC)/MED/2024-25

The Superintending Engineer, West Circle, Municipal Engineering Directorate, Patal Bazar, 3rd Floor, Tinkonia, Purba Bardhaman, on behalf of the Governor of West Bengal invites sealed competitive Bid on **Item rate Basis** (Two-part System) from reliable and resourceful Companies/Firms/Contractors having experience and acumen in Supplying & Laying works of Ductile Iron Pipes for water supply projects as noted below.

1.

Sl. No	Name of the Work	Estimated Amount (Rs.)	Earnest Money & Tender fee (Rs.)	Period of Completion
a	House Service Water Connection with saddle to 2701 No. of Premises at different wards up to private property line with 20mm OD HDPE (PE100, PN16) with necessary connection accessories including Water Meter and restoration of damages of road/pavement etc. for Water Supply Scheme at Zone 1 including different zone incl. 4 Years Operation and Maintenance Works after 1st. Year comprehensive Operation & Maintenance under AMRUT 2.0 within Dainhat Municipality	Item Rate Tender	Initial Earnest Money - Rs.4,00000/- (Rupees Four lakh only) Balance Earnest Money will be as detailed in Sl. No. 6	365 days
b	House Service Water Connection with saddle to 1458 No. of Premises at different wards up to private property line with 20mm OD HDPE (PE100, PN16) with necessary connection accessories including Water Meter and restoration of damages of road/pavement etc. for Water Supply Scheme at Zone 2 including different zone incl. 4 Years Operation and Maintenance Works after 1st. Year comprehensive Operation & Maintenance under AMRUT 2.0 within Dainhat Municipality	Item Rate Tender	Initial Earnest Money - Rs.2,00,000/- (Rupees Two lakh only) Balance Earnest Money will be as detailed in Sl. No. 6	365 days
С	House Service Water Connection with saddle to 2793 No. of Premises at different wards up to private property line with 20mm OD HDPE (PE100, PN16) with necessary connection accessories including Water Meter and restoration of damages of road/pavement etc. for Water Supply Scheme at Zone 3 including different zone incl. 4 Years Operation and Maintenance Works after 1st. Year comprehensive Operation & Maintenance under AMRUT 2.0 within Dainhat Municipality	Item Rate Tender	Initial Earnest Money - Rs.4,00,000/- (Rupees Four lakh only) Balance Earnest Money will be as detailed in Sl. No. 6	365 days

2.	Scope of Work	For New HSC with Metering arrangement for supply of water:	
2.	Scope of Work	For New HSC with Metering arrangement for supply of water:  Work includes supplying, fitting, fixing Multi Jet Class- B domestic/commercial water metering system (size 15 mm) strictly conform to IS 779-1994 (with all amendments) or MID with AMR compatibility as per departmental specification to be installed in PE cover box including supplying, fitting, fixing 10mm Brass ferrule, 20mm OD HDPE (PE100, PN16) (up to 10 m length and above 10 m to 20 m) of length (0- 10 metre &10-20 metre) & necessary fittings, Bib-cock and stop-cock including 15 mm dia. GI pipes (TATA medium) of 2m length within the consumer's premises. Work also includes excavation/dismantling of existing road crust upto the bottom of the distribution pipe and re-filling & repairing the pit/road by Plain cement concrete, repairing of damages of drain, existing water supply line etc caused for providing house service connection. Quantity for Dismantling and Restoration has been considered as avg. 0.15 cum for 10 m & avg.0.3cum for 10 m to 20 m for each connection respectively. Entire work will be covered under 5 years Defect Liability Period from the date of completion of execution of work (excluding operation and maintenance) of each zone. However, Scope of work will also including 4 Years Operation and Maintenance Works of House Service Connection with Water Meter after One year Comprehensive Operation & Maintenance works and periodical meter reading data of each and every consumer to be supplied by the contractor to the Municipality in a soft as	
		well as hard copy along with arrangement of the training of ULB personnel.	
3.	Location of Work:	At all Zones (as mentioned) within Dainhat Municipality	
4.	Eligibility to participate in the Bid	A. For 1 <sup>st</sup> call of e- NIT:  i) Intending tenderers should produce credentials of a similar nature of Completed work of the minimum quantity of 40% (forty percent) of the quantity as mentioned in each Zone during last 5 (five) years prior to the date of issue of the tender notice;  or,  ii) Intending tenderers should produce credentials of 2 (two) similar nature of completed work, each of the minimum value of 30% (thirty percent) of the quantity as mentioned in each Zone during last 5 (five) years prior to the date of issue of the tender notice;  or,  iii) Intending tenderers should produce credentials of one single running work of similar nature which has been completed to the extent of 80% (eighty percent) or more and quantity of which is not less than the desired quantity at i) above;  In case of running works, only those tenderers who will submit the certificate of satisfactory running work from the concerned Executive Engineer, or equivalent competent authority will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executed agency, i.e., the tenderer	

(iv) Have completed laying of rising main/conveying main /distribution line for any water supply project of minimum quantity >40% of equivalent length[15m x \_\_nos of HSC (Number as per table 1 according the mentioned zone)] or

amount as per the below mentioned table against each Zone in the last 5(five) years prior to the date of issue of the tender notice:

Zone	Minimum Amount of work for single work	Minimum Amount of each work for 2 nos work	Minimum Amount for one single running work of similar nature which has been completed to the extent of 80% (eighty percent) or more and Amount of which is not less than the amount as below
I	Rs 92 Lakhs	Rs 69 Lakhs	Rs 92 Lakhs
II	Rs 49 Lakhs	Rs 37 Lakhs	Rs 49 Lakhs
III	Rs 95 Lakhs	Rs 72 Lakhs	Rs 95 Lakhs

B. Annual Turn Over: Annual Turn Over (mentioned in table below in any one year within last five financial years) in 3CB & 3CD format duly authenticated by registered C.A. shall be submitted. The Audited Report should contain the signature, name, address, contact no./email ID and membership no., UDIN no. of Chartered Accountant clearly.

Zone	e Minimum amount of Annual Turnover	
I	Rs 92 Lakhs	
II	Rs 49 Lakhs	
III	Rs 95 Lakhs	

- C. Bank Solvency: Valid Bank solvency as per the table under 4B (as tabulated earlier) against each Zone (from any Indian scheduled / nationalized bank) issued within last 12 (twelve) months from the publication of this NIT.
- D. GST, P. Tax Clearance Certificates and receipts (current), PAN Card, ESI and EPF registration etc.
- N.B.-1. No joint venture, consortium etc. will be accepted. Work completed as sub-contractor will also not be accepted as credential.
- 2. Bidder intending to participate in more than one zone shall have to furnish a single credential for summation of quantity/amount considered for the tender for those zones. The Annual Turn over and Bank Solvency should also be cumulative for multiple zones.

5.	Documents to be produced in support of		A successful performance and completion certificate have to be furnished and should be supplemented with work order along with tender schedule issued by the competent authority in support of
	Credential – Bid Part-I Prequalification		credibility in terms with eligibility criteria depicted in this Notice (Ref: Sl. No. 4 :Eligibility to participate in the Bid). Besides this, following documents shall have to be furnished:
	Documents)	a.	Particulars of ownership/partnership or Board of Directors
		b.	pertaining to the Organization/Company/Firm  Valid GST, P. Tax Clearance Certificates and receipts (current), PAN Card (including preceding three years IT return), Trade license, ESI and EPF registration etc.
		c.	Valid Bank solvency Certificate
		d.	Valid documents in support of Audited Annual Turnover in full 3CB & 3CD format
		e.	Experience and address, fax & telephone nos., mobile no., & e-mail, ID nos. of the firm.
			All documents in original to be produced in due course of time as & when asked by the Bid Inviting Authority.
6.	Earnest Money		2% of the Quoted Bid price in two parts, viz
		a.	Initial earnest money is to be deposited with bid proposal and may be remitted by selecting from either of the following payments modes:  i) Net Banking: (any of the banks listed in the ICICI Bank Payment Gateway) in case of payment through ICICI Bank Payment Gateway.  Bank Acknowledgement Slip to be uploaded during online bid submission:  ii) RTGS / NEFT in case of offline payment through bank account in any bank and also to be documented through e-filling.
		b.	Earnest Money Deposit i.e. 2% of bid amount beyond <b>Initial Earnest Money</b> (if any) shall have to be deposited after acceptance of Bid Proposal. (Shall be paid by online internet bank transfer or NEFT or RTGS (as per GO No. 3975-F(Y) dt. 28.07.2016 of Finance Deptt., Govt. Of West Bengal). Additional Performance security deposit @10% of the accepted amount is to be deposited in due course as per Go WB norms if the accepted amount is found to be @ 80% or less than the departmental justified amount as per GO No.4608 f(y) Dt.18.07.2018
7.	Cost price of Bid documents		NIL (Only successful bidder has to purchase <b>4(four) Sets</b> tender documents from the ULB at the time of agreement as per order no-452-A/PW/O/10C-35/10 DT 26.7.2011.)

8.	Date and Time Schedule :-	S1. No.	Particulars	Date and Time	
	Schedule	a)	Date of uploading of NIeB. And Bid	17.01.2025 at 06.00 P.M.	
			Documents online) (Publishing Date)  Documents download/sell start date (Online)	17.01.2025 at 06.30 P.M.	
		c)	Date of Pre Bid Meeting with the intending bidders in the Office of the Superintending Engineer, West Circle, M.E.Dte.	31.01.2025 at 03.00 P.M.	
		d)	Bid submission start date (On line)	20.01.2025 at 10.00 P.M.	
		e)	Bid Submission closing (On line)	13.02.2025 at 05.00 P.M.	
		f)	Bid opening date – Technical Proposals (Online)	17.02.2025 at 10.00 A.M.	
		g)	Date of uploading list – Technically Qualified Bidders (online)	To be notified later	
		h)	Date and Place – opening of Financial Proposal (Online)	To be notified during uploading of Technical Evaluation Sheet of Bidders	
		i)	Date of uploading of list of qualified bidders along with the offer rates through (on line),	To be notified later.	
		j)	Date of rate negotiation through offline with L1 bidder only (if necessary).	To be notified later.	
9.	Time of completion		Time of completion of the Contract is as mentioned in the Table above for period of completion as per calendar days from the date of issuance of Work Order.		
10.	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 with latest amendments, CPHEEO manuals, Clauses & Sub Clauses of the Bid documents, prevailing Govt. circulars & orders and to have fully acquainted with all details of work front, communications, underground utility services, seasonal weather and its variation, labours, water supply, existing & proposed site levels, position and diversion of transportation and barricading, if required, electricity and any other general information including topological condition & existing level and level pertaining to and needed – the work to be completed in time properly.  The road crossings and cutting of permanent road shall be carefully			
11.	Bid documents	inspect A full s	set of Bid documents consists of 2 Parts. The	ese are	
		PART I :-Containing all documents in relation to the name of the firm applied – and credential possessed along with all documents as depicted in Sl. No. 4 along with this NieB and its all corrigenda's.  And			

	<u>,                                      </u>	
		Section A: General specifications of materials to be used for house Connections.
		PART II:-Containing the Following Document.
		Bid Price / Price Schedule.(.xls format)
12.	Validity of Bid	A Bid submitted shall remain valid for a period of 365 ( three hundred & sixty five ) calendar days from the date of opening of Bids. Any extension of
		this validity period if required will be subject to concurrence of the Lowest Bidder.
13.	Withdrawal of Bid	A Bid once submitted shall not be withdrawn within the validity period. If any Bidder/Bidders withdraw his/their Bid(s) within the validity period then Earnest Money as deposited by him/them will be forfeited.
14.	Acceptance of Bid	The Superintending Engineer, West Circle, M.E. Directorate. will accept the Bid on recommendation of the appropriate authority of MED or SLTC, AMRUT or UDMA Department. He does not bind himself to accept otherwise the lowest Bid and reserves to himself/herself the right to reject any or all of the Bids received without assigning any reason thereof.
15.	Intimation	The successful Bidder will be notified in writing of the acceptance of his Bid. The Bidder then becomes the "Contractor" and he shall forthwith take steps to execute formal Contract Agreement in appropriate "W.B. form-2911" with the "The Superintending Engineer, West Circle, M.E. Directorate" and fulfil all his obligations as required by the Contract.
16.	Escalation of Cost	There will be no escalation in cost for materials or labour and the contract price mentioned in the contract stands valid till completion of the contract, and other obligation, if any.
17.	Name & address of Engineer-In- Charge (EIC) of the Work	The Executive Engineer, Burdwan Division, Municipal Engineering Directorate, Urban Development and Municipal Affairs Department, Purbo Buedwan.
18.	Execution of Work	The Contractor is liable to execute the whole work as per direction and instruction of the Executive Engineer, Burdwan Division of Municipal Engineering Directorate who is the "Engineer-in- Charge" of the work under the control of "The Superintending Engineer, West Circle, M.E. Directorate."

19.	Payment		Payment will be made to the successful Bidder by the Executive Engineer, Burdwan Division of Municipal Engineering Directorate.  Any type of payment would be made on the basis of completed work(s) only.  Date of completion to be treated when the works completed as mentioned in the BOQ(except periodical meter reading for one year) and after that the scope of work of meter reading to be commenced.			
			Term	Terms of Payment : Item wise break up		
			HO	OUSE SERVICE CONNECTION WITH METE ARRANGEMENT	RING	
			1	Providing House Service connection from the CI/DI/UPVC/HDPE/GI/AC distribution pipeline by sup & fixing of 10 mm NB Brass Ferrule conforming to IS with latest amendments on the said pipeline with suppl fixing of all other accessories like saddle piece of	oply, fitting 5 2692:1989 y, fitting &	
				Break up:	% of	
			A.	On Completion of the House service connection with metering arrangement all complete in working condition as per BOQ along with restoration works.	payment 75%	
			В.	Testing of leakage, others etc. of House service connection line from supply point to delivery point of the beneficiary. (except periodical meter reading for one year)	10%	
			C.	One Year Comprehensive Operation & Maintenance and Meter reading with submission of reports to ULB for one (1) year	5%	
			D	Four Year Operation and Maintenance works of House Service Connection with Water Meter after 1 <sup>st</sup> . Year Comprehensive Operation and Maintenance Works incl. all cost and complete.	10%	
				Total	100%	
			Note:	Meter reading to be done after four (4) month intervals a may be made each four (4) months interval on pro-rate Security deposit to be deducted from part C.		
20.	Influence		is strictly	empt to exercise undue influence in the matter of accepta y prohibited and any Bidder who resorts to this will rene rejection.		
				by the concerned Bidder during the process of Bidding		
21.	In case office faces sudden closure owing to reason beyond the scope and control of "The Superintending Engineer, West Circle, M.E. Directorate.", any of last date/dates as schedule in Sl. No 8 may be extended up-to/to next and following working day without issuing further and separate notice should the "The Superintending Engineer, West Circle, M.E. Directorate.", feels it to be necessary and exigent.					
22.	_	Persons having authenticated and having registered Power of Attorney may be considered lawfully				
23.	Sufficient care has l Documents in the E documents, the pro	becoming to be acting on and for behalf of the Bidder.  Sufficient care has been taken to avoid variance in between the contents of the listed  Documents in the Bid document. However, if there is any variance between the contents of different documents, the provision of documents appearing earlier in the list shall prevail over the same provided in the contents coming later.				
24.	Imposition of any of	luty/t	ax/rule et	cc. owing to change /application in legislations/enactmer ct and to be adhering to by the Bidder/Contractor strictly		

25. Bid Acceptance Authority is the "The Superintending Engineer, West Circle, M.E. Directorate." 26. In case of any dispute arising from any clauses of similar nature between bid documents and "W.B. form-2911 " the decision of the Superintending Engineer, West Circle, M.E. Directorate, will be final and binding. 27. All usual deductions for taxes as applicable i.e. GST, IT, and Labour welfare cess etc. as applicable will be made from the bills from time to time. No conditional Bid shall be entertained. 28. 29. In the event of e-Filing intending bidder may download the Bid document from the website http://wb.tender.gov.in directly by the help of Digital Signature Certificate & necessary cost of Bid document (if any) may be remitted through online mode & same may be documented along with earnest money Deposit through e-Filling, (scanned copy to be submitted) (Details of which has been narrated in "Instruction to Bidders"). Technical Bid & Financial Bid both will be submitted concurrently duly digitally signed in the Website http://etender.wb.nic.in. Bid document may be downloaded from website & submission of Technical Bid/Financial Bid as per Bid Schedule. 30. The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the site of works and its Surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the work as mentioned in the Notice inviting Bid, the cost of visiting the site shall be at the Bidder's own expense. Traffic management and execution shall be the responsibility of the Agency at his/her/their risk and cost. 31. Prospective applicants are advised to note carefully the minimum qualification criteria as Mentioned in 'Instructions to Bidders' before bidding. 32. During scrutiny, if it is come to the notice to Bid inviting authority that the credential or any other papers found incorrect/manufactured/fabricated, that Bidder will not be allowed to participate in the Bid and that application will be out rightly rejected without any prejudice. 33. Before issuance of the work order, the Bid inviting authority may verify the Credential & other documents with the original of the lowest bidder if found necessary. After verification, if it is found that such documents submitted by the lowest bidder is either manufacture or false, in that case, L.O.A./ work order will not be issued in favour of the bidder under any circumstances. 34. If any discrepancy arises between two similar clauses on different notifications, the decision of the TIA on recommendation of the Superintending Engineer, West Circle, M.E.Dte. is final & binding. 35. Contractor shall have to comply with the provisions of (a) the contract labour (Regulation Abolition) Act. 1970(b) Apprentice Act. 1961 and (c) minimum wages Act.1948 of the notification thereof or any other laws relating thereto and the rules made and order issued there under from time to time. 36. Where an individual person holds a digital certificate in his own name duly issued to him against the company or the firm of which he happens to be a director or partner, such individual person shall, while uploading any Bid for and on behalf of such company or firm, invariably upload a copy of registered power of attorney showing clear authorization in his favour, by the rest of the directors of such company or the partners of such firm, to upload such Bid. The power of attorney shall have to be registered in accordance with the provisions of the Registration Act, 1908. 37. Any legal matter will be settled within the jurisdiction of Hon'ble District Judges Court at Burdwan, Dist.-Purbo Burdwan, West Bengal. 38. Bidder would be at liberty to point out any ambiguities, contradictions, omissions etc. seeking clarifications thereof or interpretation of any of the conditions of the Bid documents be-e the Bid Inviting Authority in writing 48 hours prior to Pre-Bid Meeting, beyond such period no representation in that behalf will be entertained by the Bid Inviting Authority. 39. The successful Bidder will remain liable for following with West Bengal Contract Labour (Regulation & Abolition) Act 1970 and necessary certificates from appropriate authority to be submitted within 07 (seven) days from the date of issue of work order, otherwise the work order will be cancelled. 40 Payment will be as per the BOQ of work. Security Deposit @ 8%(Eight Percent)/ as per prevailing Govt. Norms, will be deducted from each and every running bill in addition to Earnest Money deposit of 2% The entire deducted amount will be refunded without any interest only after successful

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41.	completion of the whole work in all respect as after full satisfaction of E.I.C. 30% of the Security Deposit money shall be refunded on expiry of 4 (four) years and balance 70% shall be refunded after expiry of 5 (five ) years from the date of completion of the work as par Notification No. 5784-PW/L&A/2M-175/2017 dt. 12.09.2017 of Principal Secretary, PWD and relevant clause of Form no. 2911. The running bill shall be paid on the basis of fully completed connections. No payment shall be made for supply of Water Meters or for incomplete connection.  In case if there be any objection regarding Prequalification of the Agency, that should be lodged to
11.	the tender inviting authority within 2 days from the date of publication of list of qualified agency and be youd that time schedule no objection will be entertained.
42	If any agency allotted two or more work, he has to mobilize man / machinery at each place and all works will be taken simultaneously and completed at per respective time period of tender stipulation.
43	The tender inviting authority reserves the right to deny or accept or reject any or all the applications and to annul the tendering process, at any point of time without any obligation & assigning any reasons what- so-ever.
44.	A prospective bidder shall be allowed to participate in a single job either in the capacity of individual or as a partner of a firm. If it found to have applied severally in a single job, all his application will be rejected for that job.
45.	Rates are inclusive of supply laying fitting fixing of 20 mm OD HDPE pipes. 2 m. GI Pipe (TATA medium), Water Meter and other fittings valves etc. GI pipes as considered should be used for each connection but length of HDPE pipe may vary as per actual requirements.
46.	TIA may call for any document at any stage of tendering process through online shortfall notice. The document(s) in possession of bidder on the date of submission of original tender only can be placed to the TIA through online mode only. Any type of generation of document after the date of original tender submission shall not be accepted.
47	<ul> <li>a) Vendor List for particular work for HDPE will be approved by the concerned Superintending Engineer, MED conforming to the PHEWB memo No. PHE/IV/2277/W-181/19 Dt.25.09.2019 and onward orders. If necessary, the concerned Superintending Engineer may approve any other make with conformity to relevant IS Specifications.</li> <li>b) And Vendor List for particular work for Water Meter will be approved by the concerned Superintending Engineer, MED conforming to the specification as mentioned in this bid Document.</li> </ul>
48	c) In case of item rate tender, the technically qualified bidder, whose total offered price considering sum of offered prices of all the items of works taken together, stands lowest, will be considered for acceptance. In no case, lowest bidder of individual items of works will be considered for acceptance for the corresponding items of works.
49	Joint Ventures will not be allowed for works up to 25 Crores. For work more than 25 Crores in case of a joint venture, Lead Member of such joint venture will be required to meet 60% (sixty percent) of required Bid Capacity and each of the Joint Venture Members will be required to meet at least 30% (thirty percent) of requirement of BID Capacity. Bid Capacity of all the members in total should be at least 100% (one hundred percent) of required Bid Capacity.
50	Partnership Firm, Company Limited Firm, Private Company Limited Firm shall be registered by the respective competent authority from the Registrar of Firms, Society, Non-Trading Corporation, Registrar of Companies etc. & copy of Registration Certificate (with allotment of Registration No.) will have to be submitted, otherwise the Technical Bid will not be considered for qualification & Financial Bid shall not be opened.

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**No Mobilisation Advance and Secured Advance will be allowed** Agencies shall have to arrange required land for installation of Plant & Machineries, (specified for each awarded work, storing of materials, labour shed, laboratory etc. at their own cost and responsibility nearest to the work site. The agencies will have to install the above machineries on the site within 45 (*forty five*) days from this end positively with application of Tender.

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#### There will be no provision of Arbitration.

In this connection vide No.215(Law)/UDMA-15011(99)/17/2023-LS-UD ,dated  $10^{th}$ .March 2023 order of the Principal Secretary , Deptt. of UD&MA shall be followed if otherwise not mentioned anything else.

## However; Clause 25 of WBF 2911 will be followed for Settlement of Disputes and Arbitration:-

"Except where otherwise provided in the contract all question and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any way arising out of relating to the contracts designs, drawings, specifications, estimate, instructions, orders or these conditions or otherwise concerning the works, or the executions or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof shall be dealt with as mentioned hereinafter;

If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 (fifteen) days request the Chairman of the Dispute Redressal Committee in writing for written instruction or decision. Thereupon, the Dispute Redressal Committee shall give its written instructions or decision within a period of three months from the date of receipt of the contractor's letter

Superintending Engineer West Circle, M.E.Dte.

#### INSTRUCTION TO BIDDERS/BIDDERS SECTION – A-I

#### 1. General guidance - e-Biding

Instructions/ Guidelines - bidders - electronic submission of the Bids have been annexed - assisting them to participate in e-Biding.

#### 2. Registration of Bidder

Any Bidder willing to take part in the process of e-Biding will have to be enrolled and registered with the Government e-procurement system, through logging on to https://wb.tender.gov.in The Bidder is to click on the link - e-Biding site as given on the web portal.

#### 3. Digital Signature certificate (DSC)

Each Bidder is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) - submission of Bids, from the Contractor of the National Information's Centre (NIC) or any other bonafide Contractor on payment of requisite amount. Details are available at the Web Site stated in Clause 2 of Guideline to Bidder. DSC is given as a USB e-Token.

4. The contractor can search and download NIeB and Bid Documents

Electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Bid Documents.

#### 5. Submission of Bids.

General process of submission, Bids are to be submitted through online to the website stated in Cl. 2 in two folders at a time - each work, one in Technical Proposal and the other is Financial Proposal be-e the prescribed date and time using the Digital Signature Certificate (DSC) the documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (trans-med into non readable -mats).

#### A. Technical proposal

The Technical proposal should contain scanned copies of the following further two covers (folders).

- A-1. Statutory Cover Containing
  - 1. Prequalification Document
  - i. As per Sl. No. 4
  - ii. Prequalification Application (Sec-B, Form I)
  - iii. Scanned Copy of earnest money (EMD) payment as prescribed in the NIe-B
- 2. NIeB (download and upload the same Digitally Signed)
- 3. Technical Document (To be filled, scanned & digitally signed)
- i. Financial Statement (Section B, form II).
- ii. Affidavits (Ref:-Declaration Of The Bidder)
- iii. Bank Solvency Certificate.
- iv. Form III & IV of Section B.
- v. Declaration by the Bidder.
- A-2. Non statutory Cover Containing/My Documents

- i. Registration Certificate under Company Act. (if any).
- ii. Registered Deed of partnership Firm/ Article of Association and Memorandum
- iii. Power of Attorney (- Partnership Firm/ Private Limited Company, if any)
- iv. Tax Audit Report in **3 CB and 3CD Form** along with Balance Sheet and Profit and Loss A/c the last five years(year just preceding the current Financial Year will be considered as year I)
- v. Clearance Certificate the Current Year issued by the Assistant Registrar of Co-Op(S) (ARCS) bye laws are to be submitted by the Registered labour Co-Op(S) Engineers' Co.-Opt.(S)
- vi. List of machineries possessed by own/arranged through lease deed along with authenticated documents of lease / sub-lease / hire basis etc.
- vii. List of technical staff along with structure and organization (Section B, Form III).

Note: - Failure of submission of any of the above mentioned documents (as stated in A1 and A2) will render the Bid liable to be summarily rejected.

## Intending Bidders should upload Non-Statutory documents as per following folders in My Document:

E-Biddi	E-Bidding system of Government of West Bengal					
Bidder	Bidder Document Sub Category Master					
Sl. No.	<b>Category Name</b>	Sub Category Name	Sub Category Description			
A	CERTIFICATES					
		A1. CERTIFICATES	1. GST Registration			
			P.F/PAN / P. Tax Clearance Certificate			
			2.E.S.I & EPF Registration Certificate.			
В	COMPANY DETA	AILS				
		B1. COMPANY	1. Proprietorship Firm (Trade License).			
		DETAILS 1	2. Registered Deed of partnership Firm and Trade License.			
			3. Registration Certificate under Company			
			Act. (if any). Ltd. Company (Incorporation			
			Certificate , Trade License)			
			4. Power of Attorney (- Partnership Firm/			
			Private Limited Company, if any)			
			5. Society (Society Registration copy, Trade			
			License)			
C	CREDENTIAL					
		C1. CREDENTIAL1	Similar nature Work & Completion			
			Certificates issued by competent authority			
			(as per Sl. No. 4 of NIeB)			
D	EQUIPMENT					
		D1.LABOURTARY	1. List of Machineries and equipment			
		D2. CIVIL	necessary - field as well as laboratory test of			
		MACHINERIES	all materials as per NIeB			
		D2. ELECTRICAL				
		MACHINERIES				

	1		
		D2.	
		MECHNANICAL	
		MACHINERIES	
		D2.	
		MISCELLENEOUS	
		MACHINERIES	
E	FINANCIAL		
	INFO		
		E1. P/L & BALANCE SHEET	P/L & BALANCE SHEET (As per NIeB)
		E2. PAYMENT	
		CERTIFICATE 1	
		E3 PAYMENT	
		CERTIFICATE 2	
F	MANPOWER		
		F1. TECHNICAL	1. List of sufficiently qualified technical
		PERSONNEL	person
			(as per Sl. No. 4 of NIeB)
		F2. TECHNICAL	1. List of technical personnel employed
		PERSONNEL ON	under
		CONTRACT	the organisation (or on contact basis ) in
			details
			with name, qualification, experience and,
			address with contact number.
G	DECLARATION	DECLARATION 1	1. Bank Solvency Certificate (As per NIeB)
		DECLARATION 2	2. Valid Document in support of annual
			turnover
			(As per NIeB)
		DECLARATION 3	3. Corrigendum and additional document (if
			any).

**Note:** Failure of submission of any of the above mentioned documents (as stated in A1 & A2) will render the Bid liable to summarily rejected for both statutory & non statutory cover. All Corrigendum & Addendum Notices, if any, have to be digitally signed & uploaded by the contractor in the Declaration Folder of My Documents.

#### B. Bid Evaluation

- i. Opening and evaluation of Bid :- If any Bidder is exempted from payment of EMD, copy of relevant Government order needs to be furnished (applicable in case of Registered Labour Co-Operative Society).
- ii. Opening of Technical proposal: Technical proposals will be opened by the Bid Inviting Authority electronically from the website using his/ her Digital Signature Certificate.
- iii. Cover (folder) of statutory documents (vide Cl. No. 5.A-1) should be opened first and if found in order, cover (Folder) non-statutory documents (vide Cl. No. 5.A-2) will be opened. If there is any deficiency in the statutory documents the Bid will summarily be rejected.
- iv. Decrypted (transformed in to readable formats) documents of the non-statutory cover will be downloaded and handed over to the Bid Evolution Committee. Scrutiny of technical proposal and recommendation thereafter and processing of comparative statement for acceptance etc. will be prepared by the Municipal Engineering Directorate, under the Urban Development and Municipal Affairs Department , Govt. of West Bengal. Comparative Statement may be forwarded to appropriate authority depending on the value of the work as applicable as per existing norms and guidelines under AMRUT programme. v. Uploading of summary list of technically qualified bidders.
- vi. Pursuant to scrutiny and decision of the screening committee the summary list of eligible Bidder and for which their proposal will be considered and uploaded in the web portals.
- vii. While evaluation, the committee may summon the bidders and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these are not produced within the stipulated time frame, their proposals will be liable to rejection.

#### C. Financial proposal

As per Sl. 11, Bid Price / Price Schedule. To be uploaded Digitally signed by the Bidder.

**6. Financial capacity** of a Bidder will be judged on the basis of working capital and available bid capacity as mentioned in the NIeB to be derived from the information furnished in – **FORM -I and II** (Section-B) i.e., Application (for Pre-qualification) and Financial Statement. If an applicant feels that his/their Working Capital beyond own resource may be insufficient, he/they may include with the application a letter of guarantee issued by a first class Bank to supplement the applicant. This letter of guarantee should be addressed to the Bid Inviting/ Accepting Authority and should guarantee duly specifying the name of the project that in case of contract is awarded to the Bidder, the Bidder will be provided with a revolving line of credit Such revolving line of credit should be maintained until the works are taken over by the Authority.

The audited Balance sheet for the last five years, net worth bid capacity etc. are to be submitted which must demonstrate the soundness of Bidder financial position, showing long term profitability including an estimated financial projection of the next two years.

#### 7. Penalty for suppression / distortion of facts

Submission of false document by Bidder is strictly prohibited and in case of such act by the Bidder the same may be referred to the appropriate authority for prosecution as per relevant IT Act with forfeiture of earnest money forthwith.

#### 8. Rejection of Bid

The Employer (Bid accepting authority) reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time prior to the award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Employer's (Bid accepting authority) action. The Bidder whose Bid has been accepted will be notified by the Bid Inviting and Accepting Authority through acceptance letter/ Letter of Acceptance. The Letter of Acceptance will constitute the formation of the Contract.

The Agreement in Printed Bid Form (form no. 2911) will incorporate all necessary documents, e.g. NIe-B., all addenda-corrigendum, different filled-up forms (Section –B), Price Schedule and the same will be executed between the Bid Accepting Authority and the successful Bidder.

Superintending Engineer West Circle, M.E.Dte.

#### SECTION - B

#### Form -I

#### PRE-QUALIFICATION APPLICATION

The Chairman, Dainhat Municipality, Dainhat, Dist:-.Purba Bardhaman West Bengal, \_\_\_\_\_(Name of work) \_\_\_\_\_ NIeB No.: Dear Sir, Having examined the Statutory, Non statutory and NIeB documents, I/we hereby submit all the necessary information and relevant documents - evaluation. The application is made by me / us on behalf of\_\_\_\_\_\_ In the capacity \_\_ duly authorized to submit the order. The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms -Application and - completion of the contract documents is attached herewith. We are interested in bidding - the work(s) given in Enclosure to this letter. We understand that: (a) Bid Inviting and Accepting Authority can amend the scope and value of the contract bid under this project. (b) Bid Inviting and Accepting Authority reserves the right to reject any application without assigning any reason. Enclo:- e-Filling:-1. Statutory Documents 2. Non Statutory Documents Date: -Signature of applicant including title and capacity in which application is made.

To

#### SECTION - B

#### Form - II

#### FINANCIAL STATEMENT

<b>B.1</b> Na	me of	App	licant	
---------------	-------	-----	--------	--

**B.2** Summary of assets and liabilities on the basis of the audited financial statement of **the last five financial years.** (Attach copies of the audited financial statement of the last five financial years)

	1st	Year	2nd Year	3rd Year	4th Year	5th Year
	(Rs	. In	(Rs. In	(Rs. In	(Rs. In	(Rs. In
	lak	h)	lakh)	lakh)	lakh)	lakh)
a) Current Assets :				•	•	•
(It should not include investment in any other firm)						
b) Current liabilities :						
(It should include bank over draft)						
c) Working capital : (a) – (b)						
d) Net worth :						
(Proprietors Capital or Partners Capital or						
Paid up Capital + Reserve & surplus )						
e) Bank loan/ Guarantee :						
(As per clause G.2. with all sub clauses)						
<b>B.3</b> Annual value of construction works	s underta	aken :				
Work in hand i.e. Work order issued	As on	As or	n As on	As on A	s on As	on
			Signed by a	n authorized	officer of th	e firm
			Title of the o	officer		
				Firm with So	eal	
			Date			

### **Declaration of the Bidder**

(Affidavit to be affirmed on a Non Judicial Stamp Paper of Rs. 10/- and enclosed with the Bid documents which is required to be submitted in time duly)				
I,, son of				
, aged about years by				
occupation				
1. That, I am the				
have duly authorized by and competent to affirm this affidavit on				
behalf of the said Bidder.				
2. That, I have inspected the site of work covered under NIeB (NIeB No ) circulated				
through Office memo bearing Nodated and have made myself fully				
acquainted with the site conditions existing level/proposed level and local conditions in and around				
the site of work. I have also carefully and meticulously gone through the Bid documents. Bid of the				
above named Bidder is offered and submitted upon due consideration of all factors and if the same is				
accepted, I on and - behalf of the a-e said Bidder, being lawfully and duly authorized, promise to				
abide by all the covenants, conditions and stipulations of the Contractual documents and to carry out,				
complete the works to the satisfaction of the Bid accepting Authority of the Work and abide by all				
instructions as may given by the Engineer in Charge of the work time to time. I also hereby undertake				
to abide by the provisions of Law including the provisions of Contract Labour (Regulation &				
Abolition) Act, Apprentice Act 1961, West Bengal Sales Tax Act, VAT Act, Income Tax Act as would				
be applicable to the Contractor upon entering into -mal Contract / agreement with the Bid				
Inviting/Accepting authority.				
3. That I declare that, no relevant information as required to be furnished by the Bidder has				
been suppressed in the Bid documents.				
4. That the statement above made by me is true to my knowledge.				
Deponent				
Solemnly affirmed by the said				

before me.  (1st class Judicial Magistrate / Notary Public)
SECTION – B-
-FORM- III
STRUCTURE AND ORGANISATION
A.1 Name of applicant:
A.2 Office Address:
Telephone No. and Cell Phone No. :
Fax No.:
E mail :
<b>A.3</b> Attach an organization chart showing the structure of the company with names of
Key personnel and technical staff with Bio-data. :
Note: Application covers Proprietary Firm, Partnership, Limited Company or Corporation,
Signature of applicant including title

and capacity in which application is made.

#### SECTION - B

#### -FORM - IV

#### C. DEPLOYMENT OF MACHINERIES (in favour of owner / lessee):-

(Original document of own possession arranged through lease deed to be annexed)

(If engaged be-e Certificate from E.I.C. to be annexed in respect of anticipated dated of release of Machineries.)

Name of	Make	Туре	Capacity	Motor /	Machine	Posses	sion Status	Date of
Machine /				Engine	NT			release If
Instrument				No.	No.	Idle	Engaged	Engaged

- each item of equipment the application should attach copies of
- (i) Document showing proof of full payment, (ii) Receipt of Delivery,
- (iii) Road Challan from Factory to delivery spot, is to be furnished.

Signature of applicant including title

and capacity in which application is made.

### Memo No:-MED/SE(W)/782(1-6)/W-278/2024

Copy Forwarded for information and wide circulation to:

- 1. The State Mission Director, AMRUT, ILGUS Bhawan, Sector-III, Bidhannagar, Kol.-106
- 2. The Chief Engineer( South Zone ), MED, Bikash Bhavan, Salt Lake, Kol.-91
- 3. The Additional Chief Engineer (South), MED, Bikash Bhavan, Salt Lake, Kol.-91.
- 4. The Chairman, Dainhat Municipality.
- 5. The District Magistrate & Collector, Purba Burdwan.
- 6. The Executive Engineer, Burdwan Division, M.E.Dte.

Superintending Engineer West Circle, M.E.Dte.

Dated: 17.01.2025

#### SECTION - A

#### GENERAL SPECIFICATIONS OF MATERIALS TO BE USED FOR HOUSE CONNECTIONS

# <u>DI Strap Saddle required for providing house service connections on DI/CI mains/ Electrofusion saddle ( HDPE ).</u>

#### **General specification:**

DI/CI/ Electrofusion saddle/Saddle with strap, protection rubber with necessary fitting & fixing to be done according to IS standard as per direction of EIC.

#### **HDPE Pipe for House Service Connection:**

Pipes shall be made out of HDPE raw materials, the pipes shall be conforming to 1S:4984-2016, 20mm OD, PE-100, PN 16 and as directed by the Engineer In Charge.

Manufacturers test certificate along with raw materials manufacturer's test certificate is mandatory. Random inspection for pipe, fittings, water meter will be carrying out.

#### **COMPRESSION FITTINGS FOR HDPE PIPES:**

90 DEG COMPRESSION ELBOWWTH METAL INSERT (Male/Female) 90 DEG COMP ELBOW with COMPRESSION JOINT BOTH ENDS FEMALE / MALE THREADED ADAPTER With METAL OFFTAKE

The Compression fittings shall be tested as per below

Type test	Standard
Dimensions of the threads	ISO 7/1
Tightness of the joints	ISO 3458
Tightness of the joints when subjected to bending	ISO 3503
Resistance to pull-out	ISO 3501
Internal under-pressure test	ISO 3459
Long term pressure test	ISO/DIS 14236

#### **FERRULE for House Service connection:**

10 mm dia Brass ferrule of ISI marked material approved by EIC upto 450mm long with plumbing joint, brass over C.P. coupling at both ends with cap Confirming to IS 2692/1994(reaffirmed 2005).

#### Non Return Valve (NRV) for connection of meter.

Tamper proof Flow Control Valve (FCV) cum Non Return Valve (NRV), made with solid steel bar (hexagonal and round) body & SS ball for float option, materials grade of Stainless Steel finished with CNC machining of size not less than 71 mm with connection size: 15mm Dia. BSP thread, design and working in float principle (as per CPHEEO manual) including cost of materials, manufacturing, Loading, unloading, transit insurance and transportation. Manufactures must provide third party inspection report from PHE approved/NABL accredited Laboratory. Materials grade of stainless steel made with SS316 Confirming to IS 778 ISI Marked

#### **GI PIPE**

G.l pipe of TATA make (medium duly) of 2 metre length with all necessary specials to continue from the end of the HDPE pipe & upto 1.0 m. above ground within the premises of household as per direction of EIC.

#### **BIB Cock & STOP cock**

Bib/Stop Cock to be made of **alloy iron with Brass Spindle** ISI marked material approved by EIC. Bib/Stop cock to be tested 21kg/m2.

#### ELBOW, NIPPLE, UNION SHORT PIECE ETC. FOR METER CONEECTION FOR EXISTING HSC

All accessories should be ISI marked material (GI) approved by EIC.

#### 15mm CPVC BALL VALVES (STOP TAP) FOR EXISTING HSC

The product shall confirm to IS-15778: 2007 and fitting, fixing should be done as per direction of EIC.

## SPECIFICATIONS FOR MULTIJET CLASS – B DOMESTIC/COMMERCIAL WATER METERING SYSTEM (SIZE 15 mm)

Sl. No.	Parameters	Specifications
		Nominal diameter of the meters shall be 15mm, 20mm & 25mm
1	Meter size and	Meter threads, nominal flow rate, minimum length of threads oneither
	overall dimensions	side; overall dimensions shall be as per table 2 of IS 779-
		1994 or table 1 of ISO 4064 (Part 1)
2	Scope of	The meter will be used for the measurement of cold, chlorinated
	Application	potable water.
		The meter shall conform to both IS: 779-1994 and ISO: 4064
	Applicable	(Part 1) standards with latest Amendments. The meters would be
3	Standards	supplied with BIS / MID Marked and Certification from Weights
		and Measures (Metrological Control of Water
		Meters) Regulations, 2014, Government of India.
		The meters shall be:
4	Meter Type	Multi-jet Inferential meters Super dry dial Hermitically sealedClass
		B, preferably 360 degree orientable totalizer.
5	Protection class	Should confirm to IP68

6	Accessories	The meter shall include the following accessories:  o Two sets of Brass nut and Nipples.  o The meter shall be supplied with a tubular strainer in the inletof the water meter with holes not less than twice the area of Nominal inlet bore of the pipeline to which it is fitted.
7	Flow rate	Minimum, maximum and transition flow shall be as per relevant Standards.
8	Accuracy	The maximum permissible error in the metering accuracy of the meter. when determining as per IS 6784:1984 shall be as under,  1. In the lower region of flow [Qmin (inclusive) to Qt

		(exclusive)]- +5%  2. In the upper region of flow [Qt (inclusive) to Qmax.(inclusive)]- +- 2%
9	Pressure and	Pressure and Temperature shall be in accordance with ISO 4064
	Temperature	Class B and IS 779-1994 and its latest amendments.
10	Pressure Loss	The pressure loss shall be in accordance with ISO 4064 class B,
10	TICSSUIC LOSS	or Clause 10.2 of IS 779-1994 and its latest amendments.
		Sealing holes shall be provided and the meter shall be sealed in
11	Seal	such a manner as to render it impossible to obtain access to the
		measuring units including registration box and cap without breaking
		the seal. The sealing wires shall be of rust free.
		All the materials used to construct / manufacture customer
		meters shall confirm to Appendix B of IS 779-1994 or clause 4.7 of ISO
12	Material	4064 (Part 1)
		o Plastic used in the manufacture of various components listedunder
		Annexure B shall satisfy all provisions as depicted under
		Clause No. 6.1.1 of IS 779-1994

		« The meter shall be constructed as per Clause No 7 of IS 779-1994 or relevant clauses of ISO 4064 (Part 1). Each meter will
13	Construction	be supplied with two cylindrical nipples or tail pieces with connecting nuts. Threads on the connection shall conform to latest version of IS 2643 (part 1 to 3) or ISO 228-1. All meters shall be supplied with an easily removable tubular inlet strainer. The seal & Sealing wires shall be rust proof material.  • Meter size & overall dimension of meter shall conform to Clause No 9 of IS 779-1994 or relevant clauses of ISO 4064 (Part 1)  • Connections: The meter casing shall be fitted in the pipeline by means of two cylindrical nipple or tail pieces with connecting nuts which shall be provided with each meter.  • The theads on connections shall conform to IS 2643 (Part1 to 3)-1975  • Impeller and Piston: Impeller and impeller shaft assembly shall rest on a self-lubricating bearing which has as low frictional resistance as possible.  • Impeller chamber & Measuring Chamber: The impeller chamber and measuring chamber shall be rigid and shall not change its form as a result of internal stress or with use.  • Dial: The dial shall be of vitreous enamel power coated on copper ensuring indestructible marking and good legibility.  • Indicating Device: Indicating Device shall be able to record 9999 k1(min) for meter size up-to 25mm. The kilolitres and its multiple shall be indicated in black and sub multiple of kilo litres in red. For digital indicator, the visible displacement of all digits shall be upward in value. The unit symbol 'KILO LITRES' shall appear in the immediate vicinity of digital indications.  • Frost Protection: Meter liable to damage by frost shall be suitable protected.

14	Mechanical Meter	The Totalizer and Totalizer shield:  o The totalizer metal can mineral glass envelop, shall be designed in such a way that if the totalizer protective glass is broken for a reason or another the totalizer cannot be removed from its place. The totalizer protective cover shall be made of sturdy glass and shall have a thickness of not less than 5mm. Sturdy glass is defined as the ability of the counter protection glass to withstand, without damage.  Totalizer:-  o It shall be of straight reading type.  o The totalizer shall register in cubic meter units.  o The totalizer shall consist of a row of minimum four on-line consecutive digits to read at least 9999 m3 as per ISO 4064/ IS 779-1994.  o Another three digits or pointers shall register flows in litres and be of a red colour.  o The totalizer or any part of it shall be capable of being repaired.  o Metal can mineral glass envelop.  o The totalizer should be of open type.  o The totalizer must be suitable for test on an electronic test bench.  o The protection class of the totalizer should be IP 68.
15	Indicating Device	The totalizer shall be designed in such a way that if the totalizer Protective lens / material are broken from any reason, the totalizer cannot be removed from its place.  It shall consist of a row of minimum four on-line consecutive digits to read at least 9999 KL as per IS 779-1994. It preferably be capable of 360 degree orientation for ease in reading.
16	Impeller and Impeller Chamber	The pivot of the impeller should be guaranteed against any Corrosion or damage for at least three years after the firstinstallation. The impeller chamber shall be resistant to corrosion and it will confirm to 15779:1994/MID.
17	Resistance to Weather Conditions	Conformity to IS779-1994/MID
18	Test	The manufacturer must carried out all test as specified in Clause No. 12 of IS 779-1994 or relevant clauses of ISO 4064 (Part 1) or MID by a recognized testing authority. The Report of test shall be furnished in accordance with IS 6784-1984.  However, the manufacturer / Supplier is liable carry out life Testas per Clause 12.4.4 of IS 779-1994 from any reputed testing authority like 'Fluid Control Research Institute' at his own cost from the lot of supplied meters. Lot size is to be determined on the basis of Table 4 of IS 779-1994. On the basis of Test Result, manufacturer / Supplier shall be liable to change defective meters or whole lots as the case may be at his own cost.

19	Marking	Each water meter shall be marked / embossed with the following information:
		<ol> <li>Manufacturer's name or Trade Mark.</li> <li>Nominal size and class of water mater</li> <li>Direction of flow of water on both sides of the body of water meter.</li> <li>Year of manufacture and serial number</li> <li>BIS / MID Certificate Marking</li> </ol>
20	Check List	Each water meter shall be supplied with a check list giving below:  1. Check that seal and serial no of the water meter is intact.  2. Check test certificate giving test results for pressure tightness,loss of pressure, metering accuracy and minimum starting flow.  3. Check that before installing meter the line is thoroughlyflushed.  4. Check that the meter is installed according to the direction offlow marked on the meter.  5. Check that inferential meter is placed horizontally with dial upwards.  6. Check that the strainer of the meter is not removed, and  7. Check that the meter has been installed as recommended in the installation drawing, supplied with the check list.

<u>In addition to above Specifications of Water Meter, further Detailed specifications are attached below for strict compliance in execution.</u>

## PROCESS AND SPECIFICATION FOR HOUSE SERVICE CONNECTIONS WITH METERING ARRANGEMENT

Before providing House Service Connections, Contractor shall collect a list of authorized consumers from the client on monthly basis. After getting such list from the client, Contractor shall have to identify each consumer at site and a notice shall have to be served by the Contractor to each consumer at site and a notice shall have to be served by the Contractor to each consumer at least 30 days in advance stating that new service connection shall be provided at their respective premises along with water meters. / Making holding list, In case of any difficulty to locate any consumers at site by the Contractor, client representative shall have to be accompanied with the Contractor to locate the client at site of all the meters.

Location of placing water meters shall have to be mutually decided by the Contractor and the consumer. No meters shall be installed inside, bath room / wash room / toilets / bed room / dining hall or any other rooms. Meter shall have to be installed in such a location that it can4 be easily accessed in side consumer premises.

All the damages made on the roads, the compound walls for providing service connection shall have to be restored by the contractor as per direction of EIC. Any damages made on the Road, floor / PCC / tiled / mosaic etc. shall be restored by the Contractor with Plain Cement Concrete (PCC 1:2:4) and neat cement finish as per direction of EIC. No tiles / mosaic shall be replaced by the Contractor.

Ferrule cleaning (if required on special exigencies) within one (1) year after completion of work to be done by the agency as per direction of EIC.

#### **Installation of Domestic Meter:**

- Location of water meters shall have to be finalized in consultation with consumers.
- In case of stone / concrete surface GI pipe shall have to laid with clamps at interval of 750 mmc/c
- Water Meters shall have to be installed as per manufacturers' specification.
- After installation of water meters sites are to be restored to its original condition as per direction of EIC.
- After installation of water meters records are to be maintained in the standard form.
- Information related to Water Meter Installations shall have to be handed over to client for **one vear**.
- Check list for providing House Service Connection shall have to be prepared by the Contractor and the same has to be filled up properly after completion of the job and signature shall have to be obtained from the respective authority / person. Feedback Form shall have to be designed by Contractor and necessary feedback of consumer shall have to be recorded properly

During installation of water meter, it shall be sealed against installation by the Contractor.

If any drain is available on the periphery of the consumer premises, then a 25mm G.I. (TATA Medium) casing pipe shall have to be provided by the Contractor. All the excavation and back filling trenches made for providing the Service.

Before starting job at site for providing House Service Connection, Contractor shall impart training to all employees on following subject:

- Safety Awareness
- Environment Management System Awareness
- Customer Orientation
- Safe working procedure

Once above trainings are imparted then schedules are prepared and following actions shall be taken:

- Housekeeping Plan of the job,
- Job Safety Plan
- Method statement

Superintending Engineer West Circle, M.E.Dte.

## 1695966/2021/O/o JS(UDMA)

### SPECIFICATIONS FOR MULTIJET CLASS-B DOMESTIC / COMMERCIAL WATER METERING SYSTEM

(Size 15 mm to 25 mm)

SI. No.	Parameterrs	Specification		
1	Meter size and overall dimensions	Nominal diameter of the meters shall be 15mm, 20mm & 25mm Meter threads, nominal flow rate, minimum length of threads on either side overall dimentions shall be as per table 2 of IS 779-1994 or table 1 of ISC 4064 (Part 1)		
2	Scope of Application Water.  The meter will be used for the measurement of cold, chloridation water.			
3	Applicable Standards	The meter shall conform to both IS:779-1994 and ISO:4064 (Part 1 standards with latest Amendments. The meters would be supplied with ISI/EEC/MID Marked		
4	Meter Type	The meters shall be:		
5	Protection class	IP-68 totalizer		
6	Accessories	The meter shall include the following accessories:  1 Two sets of Brush nut and Nipples.  1 The meter shall be supplied with a tubular strainer in the inlet of the water meter with holes not less than twice the area of nominal inlet bor of the pipeline to which it is fitted.		
7	Flow rate	Minimum, maximum and transition flow shall be as per relevant standards.		
8	Accuracy	The maximum permissible error in the metering accuracy of the meter when determining as per IS 6784:1984 shall be as under;  1. In the lower region of flow [Qmin (inclusive) to Qt (exclusive)]- ± 5%  2. In the upper region of flow [Qt (inclusive) to Qmax (inclusive)]- ± 2%		
9	Pressure and Temperature	Pressure and Temperature shall be in accordance with ISO 4064 class and IS 779-1994 and its latest amendments.		
10	Pressure Loss	The pressure loss shall be in accordance with ISO 4064 class B, or Claus 10.2 of IS 779-1994 and its latest amendments.		
11 11	Seal	Sealing holes shall be provided and the meter shall be sealed in such manner as to render it impossible to obtain access to the measuring unincluding registration box and cap without breaking the seal. The sealing wires shall be of rust free.		
12	Material	All the materials used to construct / manifacture customer meters sha confirm to Appendix B of IS 779-1994 or clause 4.7 of ISO 4064 (Part 1) 0 Plastic used in the manufacture of various components listed under Annexure B shall satisfy all provisions as depicted under Clause No. 6.1 of IS 779-1994		

Joly Chaudhuri, WBCS (Exc.)
Joint Secretary
Urban Development & Municipal Affairs Departm
Government of West Bengal

695966/2021/Qtords(UDMA)	Specification
	The meter shall be constructed as per Clause No 7 of IS 779-1994 or relevant clauses of ISO 4064 (Part 1). Each meter will be supplied with two cylindrical nipples or tail pieces with connecting nuts. Threads on the connection shall conform to latest version of IS 2643 (part 1 to 3) or ISO 228-1. All meters shall be supplied with an easily removable tubular inlet strainer. The seal & Sealing wires shall be rust proof material like engineering plastic.
	Meter size & overal dimension of meter shall conform to Clause No 9 of IS 779-1994 or relevant clauses of ISO 4064 (Part 1)
	Connections: The meter casing shall be fitted in the pipeline by means of two cylindrical nipple or tail pieces with connecting nuts which shall be provided with each meter.
13 Construction	The theads on connections shall conform to IS 2643 (Part 1 to 3)-1975  Impeller and Piston: Impelier and impeller shaft assembly shall rest on a self lubricating bearing which has as low frictional resistance as possible.
	Impeller chamber & Measureing Chamber: The impeller chamber and measuring chamber shall be rigid and shall not change its form as a result of internal stress or with use.
	Dial: The dial shall be of vitreous enamel power coated on copper or plastics ensuring indestructible marking and good legibility.
	Indicating Device: Indicating Device shall be able to record 9999 kl(min) for meter size up-to 25mm. The kilo litres and its multiple shall be indicated in black and sub multiple of kilo litres in red. For digital indicator, the visible displacement of all digits shall be upward in value. The unit symbol 'KILO LITRES' shall appear in the immediate vicinity of digital indications.
	Frost Protection: Meter liable to damage by frost shall be suitable protected.

100. 50 . May

Joly Chaudhuri, WBCS (Exe.)

Joint Secretary

Urban Development & Municipal Affairs Department

Government of West Bengal

95966720	21/Operals (ALDMA)	Specification
		The Totalizer and Totalizer shield:-  n The totalizer copper / plastic can mineral glass envelop, shall be designed in such a way that if the totalizer protective glass is broken for a reason or another the totalizer cannot be removed from its place. The totalizer protective cover shall be made of sturdy glass and shall have a thickness of not less than 5mm. Sturdy glass is defined as the ability of the counter protection glass to withstand, without damage.
14	Mechanical Meter	Totalizer:-  It shall be of straight reading type.  The totalizer shall register in cubic meter units.  The totalizer shall be set at 0 (zero)
		n The totalizer shall consist of a row of minimum four on-line consecutive digits to read at least 9999 m3 as per ISO 4064/ IS 779-1994.  Another three digits or pointers shall register flows in litres and be of a red colour.  The totalizer or any part of it shall be capable of being repaired.  Copper /plastic can mineral glass envelop  The totalizer should be of open type.  The totalizer must be suitable for test on an electronic test bench.  The protection class of the totalizer should be IP 68.
15		The totalizer shall be designed in such a way that if the totalizer protective lens / material are broken from any reason, the totalizer cannot be removed from its place.  It shall be set to Zero at the factory, excepting the volum registered while
		It shall consist of a row of minimum four on-line consecutive digits to read at least 9999.99 (4+2 digits) m3 ot KL as per ISO 4064 /IS 779-1994. It preferably be capable of 360 degree orientation for ease in reading.
16	Impeller and Impeller Chamber	The pivot of the impeller should be guaranted against any corrosion of damage for at least three years after the first installation. The impelled chamber shall be resistant to corrosion.
17	Compatibility with the Water Meters	End units must have a robust structure that is as resistant as possible to vandalism. End units that are sealed, have an antenna, and are integral.

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No.	21/Orards(UDMA)	Specification
18	Resistance to Weather Conditions	End units must be resistant to extreme weather conditions, including th following:
		Temperatures ranging from - 5°C to 50°C
		Relative humidity from 5% to 95%.
		The level of resistance for end units must be IP68.
	Resistance to Noise, Electrical and Radio Disturbances	Ability to operate in a noise electrical environment with electromagneti disturbances (EMI)
19		Ability to operate in an environment with radio frequency interference (RFI) including those emanating from the activities of the communication system wavelength.
		Protection against current fluctuations and lightning according to international codes and requirements.
		End units must identify the movement of the dial and count the pulses, or identitify the numbers absolutly. End units that read the water meter in a more precise manner- such as absolute encoder or absolute counter will constitute an advantage. Meters must have scan time ability that enables reading in a resolution of 1 litter in a 3/4" meter with a maximum output of 5,000 litres per hour.
20	General Characteristics	End units must be able to diagnose fluctuations in the dial as a result of fluctuations in the water flow. A system that performs this function by reading the movement of the dial/wheel that counts in two points(creating a pulse only when the dial/wheel passes over two points) will constitute an advantage. Reading at 3 points (enabling identification of backward flow) will constitute an additional advantage. Another advantage will be a more reliable reading method, such as an absolute counter or even more so, an absolute encoder.
		End units must identify backward flow and calculate the amount on the electronic counter (program) separately.
	t	End units that are installed on main lines must be able to identify flow in wo directions (such as using 3 points in the rotation cycle of the counter lial / wheel).
	I	nformation logged in end units must include at least: The end unit ID number.

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959	6/202 No.	1/Qtords(UDMA)	Specification
		Test	The manufacturer must carried out all test as specified in Clause No. 12 of
			IS 779-1994 or relavant clauses of ISO 4064 (Part 1) or ECC by a
			recognized testing authority. The Report of test shall be furnished in
			accordance with IS 6784-1984.
			However, the manufacturer / Supplier is liable carry out life Test as per
	21		Clause 12.4.4 of IS 779-1994 from any reputed testing authority like
			'Fluid Control Research Institute' at his own cost from the lot of
			supplied meters. Lot size is to be determined on the basis of Table 4 of IS
			779-1994. On the basis of Test Result, manufacturer / Supplier shall be
			liable to change defective meters or whole lots as the case may be at his
			own cost.
		美语 医二	Each water meter shall be marked / embossed with the following
		SI THE RESERVE OF THE PARTY OF	information:
			1. Manufacturer's name or Trade Mark.
	22	Marking	2. Nominal size and class of water mater
			3. Direction of flow of water on both sides of the body of water meter.
			4. Year of manufacture and serial number
		67 II II II II II II	5. BIS/EEC/ISO/MID Certificate Marking
	23	Shipping	The water meters shall be packed in corrugated cartoon boxes containing
	23	Containers	not more than twenty (20) meters each.
			Each water meter shall be supplied with a check list giving below:
			1. Check that seal and serial no of the water meter is intact.
			2. Check test certificate giving test results for pressure tightness, loss o
	24	Check List	pressure, metering accuracy and minimum starting flow.
			3. Check that the meter is installed according to the direction of flow
			marked on the meter.
			4. Check that the strainer is not removed.

ACE(N), MED

Chief Engineer KM DA (Was Lector)