GOVERNMENT OF MAHARASHTRA
Water Resources Department
Budgetary offer for Non DSR Items.
Notice No. 4 of 2021
(For Estimation Purpose Only)

Executive Engineer, Gate Mfg. Division A, Dapodi, Pune-12 invites minimum possible rates of below described items / activities for estimation purpose from the interested and experienced firms /agencies / of experienced firms. The detailed item with rate in sealed envelope will be received in the office of the Executive Engineer, Gate Mfg. Division A, Dapodi, Pune-12 on or before Dtd.- 9 /02/2021 **Up-to 2:00 pm.** The rates received beyond above mentioned date can't be considered. The envelop must mention Item & Date. The sealed envelope will be opened on Dtd- 9 /02/2021 **2:00 pm** if possible & will be submitted to Executive Engineer, Gate Mfg. Division A, Dapodi, Pune-12 for further processes. The rates invited for estimation purpose only.

The taxes such as GST and other relevant taxes etc. if any may be mentioned separately.

S. N.	Description	Unit	Rate
A	**Item No.1 Full-Bore Electromagnetic Flow Meter:**		
1	Supply, install and commission Electromagnetic Flow Meter (EMF) As Per ISO 4064, for Raw/Pure water with accuracy +/-0.5% of measured value & protection as per given specifications for **size 1800mm** including sensor, transmitter surge arrestor, cable suitable size for 25 mtrs built in GSM (with Sim card and its charges, valid for 36 months) including the pipe cutting, leveling and installation of flow meter in the pipelines with necessary tool tackles, cranes including 36 months guarantee etc complete, as may be required at site & based on required technical specifications.	1 No.	
B	**Item No.2 Glandless CIDF Sluice Valve PN - 1.0**		
1	Providing, erecting, testing and commissioning C.I. Glandless Sluice valve suitable for working pressure of 10 kg/cm2 with standard non rising spindle, hand wheel, cap etc and manufactured as per IS 2906/14846 and of **diameter 1800mm** as per detailed specifications.	2 Nos.	

NOTE: - Budgetary offer is invited only for the Estimation Purpose. It does not give any assurance Regarding floating of tenders or otherwise.

GMDA/TS/Budgetory Offer/Non DSR/250 /2021
Date :27/ 1 /2021

Executive Engineer
Gate Mfg. Division A,
Dapodi, Pune-12

ANNEXURE –A

Supply, install and commission Electromagnetic Flow Meter (EMF) As Per ISO 4064, for Raw/Pure water with accuracy +/-0.5% of measured value & protection as per given specifications for size 1800mm including sensor,transmitter surge arrestor, cable suitable size for 25 mtrs built in GSM (with Simcard and its charges,valid for 36 months) including the pipe cutting, leveling and installation of flow meter in the pipelines with necessary tool tackles, cranes including 36 months guarantee etc complete, as may be required at site & based on technical specifications mentioned below:

A) Mandatory Accessories:

1) The sensor should be as per IP-68 protection & with flanges of PN 10 rating from CS-1 No.
2) The sensor coil housing shall be IP-68.This protected against external magnetic field.
3) The transmitter shall have one current 4 m A-20 mA output.
4) The current output shall be galvanically / optically isolated. It shall be fitted with switched mode power supply capability 85-260 V & 45-65 Hz to cope up with power transients without damage.
5) Signal & power cables shall be of 50 Mtrs length/each.
6) Conduit pipe (PVC Plumbing schedule 4) 25 mm diameter with suitable rating of cable with digging, laying & concealed the duct - 25 mtrs/each.
7) UPS working on 230 V AC, 50 Hz power supply suitable for 12 hrs continuous operation-1 No.
8) Data storage capacity with built in or separate for date time, actual flow rate, totaliser & error messages if any with storage capacity of 120 days -1 No.
9) 21",80 column Dot matrix printer of EPSON, WIPRO, or Hewlett Packard make with printer interface unit for printing of stored data as per 8 /1 No for meter management system.The printer shall be installed as directed by engineerin-charge.
10) Proper earthing shall be provided for protection against high voltage surge.
11) Suitable over voltage protection unit for protection of instrument from higher voltage (upto 300 V AC)
12) Fixing flow meter transmitter to internal walls of buildings in a suitably designed panel cabinet with proper locking arrangement with glass window on front door for seeing the readings of flow transmitter and data logger without opening of the panel cabinet. It should house complete ancillaries and including the provision for connection of electrical power supply from near by apparatus. The panel cabinet shall be prewired and with suitable gland entries.

B) Working Condition & Specifications

a) Water Temp : 10 Deg to 50 Deg
b) Water Quality: Raw water, turbid in nature. Potable chlorinated water
c) Operating pressure:10-15 Kg./cm^2
d) Pipeline MOC:CI,DI,MS with /without mortar lined, Nonmetallic pipes.HS & PSC
e) Pipe condition: pipe shall be running full.
f) Full-Bore Bi-directional Electromagnetic Flow meters shall be designed, manufactured & calibrated to international standards with accuracy of +/-0.5% of reading.
g) The supplier should have full ISO-9000 series accreditation & full it aceable calibration methods to either of the two primary standard means of testing i.e. mass (ISO 4185) or volume (ISO 6817)
h) Each meter shall be wet calibrated at the place of manufacturing with 3 point calibration at sufficient flow rates. The testing facility shall be duly accredited in accordance to ISO 17025
i) The sensor shall be of standard length as per ISO 13359
j) The sensor shall have built in stainless steel Grounding Electrode & Empty pipe Detection. Any ground probes, rings, flanges or straps will be strictly not acceptable.
k) The liner material shall be either Certified Hard Rubber (HR) with Drinking water Approval or Polyurathane (PU) & teflon.
l) The sensor & transmitter shall be capable of working in tropical environment.
m) The Meter body shall be flanged or with custom connector as per the requirement. Wafer designs will not be acceptable.
n) The housing of flow meter shall be Die cast Aluminum/painted steel with suitable anti-corrosive paint.
o) The flow meter shall be suitable for both submergence as well as burial installation & shall withstand all necessary natural shocks.
p) The transmitter & sensor shall not have any EMI interferences in the actual flow meter reading.
q) The transmitter shall be wall-mounted type with a 2-line display for the indication of Actual Flow rate & Totalized value. The material enclosure shall be sufficient to guarantee 5 year operation life.
r) The transmitter shall be capable of fully programmed with push button/using HART communicator. It shall have a setup menu so that all relevant parameters may be user-set from the self-prompting driven menu. The repeatability shall be 0.1% of reading or better, minimum+/-0.5mm/s
s) The transmitter shall have one scalable pulse output. One current (HART) output. The current output shall be galvanically isolated. It shall be fitted with switched mode power supply capability 85-260 V & 45-65 Hz to cope with power transients without damage.
t) The totalizer value shall be protected by EEPROM during power outage, and utilizes an overflow counter.

u) The flow meter shall be provided with remote display suitable without any signal booster/amplifier for distance upto 150 Mtrs. for online MIMIC

C) Calibration, Testing & Inspection

The total supply quantity shall be inspected and tested as below. The flowmeter shall be calibrated at manufacturers place as per international standard given above.Manufacturer having NABL lab accrediation ,the calibration testing shall be witnessed by Third party approved by MJP .The manufacturer not having NABL lab accrediation shall be tested at FCRI/CWPRS/IDEMI etc. for which third party inspection is not required.

D) Manufacturer's Guarantee, Certificate & training

The flow meters shall be supplied with manufacturer's test certificate as per international standards given above. calibration certificates. 36 months guarantee for the trouble free performance and given adequate training for handling flow meter and installation in field so that trainees can carryout the job independently.

E) O & M towards flow meter & accessories

The O & M shall be decided based on " planned preventive maintenance" Program (PPM) to be finalized with suppliers with following service included (but not limited) for 36 months beyond standard warranty. However for project cases user must discuss with supplier for lumpsum O & M cost for the overall project.

F) Planned Preventive Maintenance (PPM):

a) Regular visit to the flow meters (once in 2 month to check the healthyness of instruments)
b) Repairs/ replacement of components/spare parts as may be necessary during the flow meter inspection.
c) Free replacement of the spare parts and consumables as necessary.
d) Emergency visit to site within 48 hours for attending any major trouble shooting and break downs.
e) Technical training/ trouble shooting training to the user by the supplier.
f) Providing complete technical details on instrument with necessary manuals

G) General Terms & Conditions

a) General Specifications with accessories (except required for each type of meter specified) working conditions, mandatory accessories, calibration, inspection testing manufacturers test certificates, installation and commissioning, guarantee and training shall be common for all flow meters as mentioned above. The optional accessories mentioned above to be considered as per project and site requirements.
b) The above prices include local inland transportation from manufacturer's godown /custom's godown upto sites anywhere in Maharashtra.
c) The above prices includes necessary packing & forwarding charges as applicable for each project
d) Octroi / LBT chargesare not included in above rates and shall be as per actuals which will be included wherever applicable in estimates for meter up to site storage
e) The above prices are inclusive of Marine & inland insurance of flow meters up to site storage
f) Planning for installation for meter shall be done during execution of pipe work. Straight pipe length of 5 D or more on up stream side and 2 D or more on down stream side of meter is necessary (D is diameter of flow meter) The meters shall be installed so as to have a laminar flow with pipe running full