Government of Tamil Nadu



ThoothukudiCorporation

Tender Document for Vehicle Monitoring System

Thoothukudi Corporation

Section – I

Notice Inviting Tenders

Tender No. : E2/1114/2022

Name of the Work :PROVIDING VEHICLE MONITORING SYSTEM (VMS) FOR

COMMAND AND CONTROL WITHCLEAR PERFORMANCEREPORT FORWASTE COLLECTIONAND OTHER ENGINEERING ACTIVITIES THROUGH CORPORATION VEHICLES ANDLINEAR WATER LEVEL SENSOR FOR THE PERIOD OF ONE YEAR IN THOOTHUKUDI CORPORATION.

Tender put value : Rs. 18,80,000.00

E.M.D. : Rs 18,800.00

Period of Completion

Date & Time of Opening : 31.05.2022 & 3.30 pm

No of Covers : Two Cover System

For and behalf of Thoothukudi Corporation Sealed tenders are invited for ProvidingVehicle Monitoring System (VMS) for Command and Control withClear Performance Report for Waste Collectionand other Engineering activities through Corporation vehicles and Linear Water Level Sensorin Thoothukudi Corporation as noted in 'A'Schedule of this notice for the use in supply head works as per detailed specification enclosed herewith and it will be received by The Commissioner, Thoothukudi corporation. For and on behalf of Corporation council sealed tenders are invited in the form prescribed for the work mentioned above and will be received by the Commissioner, Thoothukudi Corporation upto31.05.2022 at 3.00 P.M as per office clock time and open the same day at 3.30 P.M Bidding document is available http://www.tenders.tn.gov.in and website till 31.05.2022 at 3.00 P.M

- 1. Tenders will be opened by the Corporation Engineer or by an officer authorized by the Commissioner in the absence of Corporation Engineer for this purpose at 3.30 P.M. on the said date in the presence of such of the meanderers or their authorized representatives as may attend.
- 2. Bidding document is available in https://tntenders.gov.in,http://www.tenders.tn.gov.in and the bidders can submit the tender by both Online or Offline.
- 3. (Original copy of EMD should be submitted to the Office before the prescribed date and time without fail)
- 4. The Tenderer should be authorized Manufacturer only.
- 5. The E.M.D. should be in the form of Demand Draft from any Nationalized bank or scheduled banks payable at Thoothukudi in favour of Commissioner, Thoothukudi Corporation or by cash

remitted at treasury counter, Thoothukudi Should be enclosed with bid document. But the original **EMD** is received after the prescribed date and time will be rejected. The **EMD** will not bear any interest. Tenders not accompanied by **Earnest Money Deposit** will be rejected. The **Earnest Money Deposit** will be returned to the unsuccessful tenderers within 15 days from the date of disposal of tender. In the case of successful tenderers, the **EMD** will be retained and converted as security deposit.

- 6. The Corporation will not accept letter authorizing the Department to adjust amounts towards **EMD/SD** out of the dues payable by the department to the tenderer.
- 7. If the tender is made by an individual, it shall be signed by him or his power of attorney in which case a certified copy of the registered power of attorney shall accompany the tender.
- 8. If the tender is made by proprietary concern, it shall be signed by the proprietor with his usual signature and furnish his full name with the full name of firm and its current address or his power of attorney in which case a certified copy of the registered power of attorney shall accompany the tender.
- 9. Attention is drawn to the Security Deposit to the extent of 2% of the total value of contract or such other security demanded which will have to be made with Commissioner, Thoothukudi Municipal Corporation, Thoothukudi by the successful tenderer and to his having to execute the contract attached within the time stated in the Letter of Tender. In respect of the successful tenderer, the EMD remitted along with the tender shall be converted as Security Deposit. The EMD remitted in any other approved forms by the successful tender converted to security deposit and he will be called upon to pay difference between 2% contract value and EMD remitted by the notified that and before signing the contract agreement.
- 10. The duration of the scripts shall be valid for the complete period of completion. The Security Deposit remitted by the successful tenderer shall not bear any interest. The form of agreement of the accepted tenderer will have to be executed with special adhesive stamps to a value of Rs.20/-, the cost of which must be borne by the tenderer.
- 11. The tender deposit of **Rs. 18,800**/-of each unsuccessful tenderer will be returned to him as soon as possible after the final disposal of the tenders, The tender deposit of **Rs.18,800** /-of the successful tender will be returned to his after he has deposited the required Security Deposit and agreement executed.
- 12. It should be clearly understood that the prices quoted in the tender are to include everything required to be done by the conditions of the contract and specification or by any drawings therein referred to, and also all such work as is necessary to the roper completion of the contract, although special mention thereof may have been omitted in the specification and schedule or drawings.

- 13. If sales tax or other taxes and duties are to be claimed separately, the same should clearly be stated in the tender. If no mention is made of taxes, the rate will be taken as inclusive of all taxes.
- 14. The tender should quote in their offer only the net excise duty and taxes to be paid by them after deducting the admissible exemption / refund of excise duties / taxes as the net Duties and Taxes payable alone would be taken in to consideration for the purpose of evaluation of tenders received and deciding the L1 tender by the Board.
- 15. The Commissioner, Thoothukudi Municipal Corporation, Thoothukudi does not bind itself to accept the lowest or any tender and will not assign any reason for its action in their respect.
- 16. The Commissioner, Thoothukudi Municipal Corporation, Thoothukudi reserves the right to subdivide the contract between two or more tenderers.
- 17. The successful tenderer will not be exempted from the payment of any municipal rates, tolls or taxes in consequence of his being contractor for the Commissioner, Thoothukudi Municipal Corporation, Thoothukudi.
- 18. The tenders shall be open for acceptance for a period of one hundred and twenty days from the last date fixed for the receipt of tenders.
- 19. The tenderers should be able to commence the supply of the Materials immediately from the date of communication or acceptance of this tender and complete the supply as mentioned in the schedule from the date of communication or acceptance of this tender and execute agreements for the supply of materials related to this work.
- 20. Any further information required may be obtained from the Office of the Commissioner, Thoothukudi Municipal Corporation,113,palai road,Thoothukudi 628002. E-mail Address: commr.thoothukudi@tn.gov.inContact No.:0461-2326901.
- 21. A certificate of Income Tax verification from the Income Tax authorities as required in Government Order No.867, Finance Budge, General Dt. 16-8-49 in the form appended therein and the Sale Tax Clearance Certificate will have to be furnished by the Successful tenderer within 14 days from the date of receipt of communication of the acceptance of this tender by the Commissioner, Thoothukudi Municipal Corporation, Thoothukudi or at the time of execution of agreement whichever is earlier. Failure to do so will entail forfeiture of tender deposit.
- 22. The rates should be quoted both in figure and in words. In case of discrepancy between the prices quoted in words and in figures, lower of the two shall be considered.
- 23. All disputes under this contract are subject to Thoothukudi jurisdiction only.
- 24. The payment will be made within 15 days after acceptance of materials at Stores under Thoothukudi Municipal Corporation, Thoothukudi.
- 25. Note: 1. The rates quoted shall include the delivery of the material to the Commissioner, Thoothukudi Municipal Corporation, Thoothukudi.

- 26. Reputed Manufacturers only eligible to participate in this tender. Proof of GST Certificate, UAM Certificate and Valid ISO9001:2015 above certificate has to submitted.
- 27. Proof should be furnished in number of years of doing the Manufacturing.
- 28. Conditional tenders will not be considered.
- 29. Supply and delivery of materials to: The Commissioner, Thoothukudi Municipal Corporation, 113, Palai Road, Thoothukudi 628002.

30. Delivery period : Within 15 days from the date of issue of purchase order

31. Payment : Within 30 days after acceptance of Materials at stores.

32. Validity of Tender : 120 Days

33. EMD :Rs. 18,800 /-The offer without EMD will not be considered.

- 34. The prices should be firm till completion of supply.
- 35. The quoted rates should be only on unit basis.
- 36. In case the taxes are extra, the tax component should be furnished separately.
- 37. The rates quoted are F.O.R Stores only. The Bids with rates F.O.R Thoothukudi/Destination/Exgo down will not be taken for consideration.
- 38. Delivery time is the essence of the contract.
- 39. The Thoothukudi Municipal Corporation reserves the right to accept or reject the tenders wholly or partly depending on its requirement on the date of order without assigning reasons. Thoothukudi Municipal Corporation also reserves the right to increase or decrease the quantity.
- 40. If your rates are covered under GeM rates, you are requested to furnish the copy of the documents regarding the rate contract rate and registration number.
- 41. Within the validity period of tender enquiry, no change in price by the tenderer shall be permitted after the opening of tenders. If any tender as his own change the price quoted by him in his tender after opening of tender, the concerned tender would become liable for refection.
- 42. Tender Issuing authority may reject or prefer any tender without assigning any reasons and may or may not accept the lowest or any tender, The Thoothukudi Corporation further reserves the right to accept the tender in par or parts only.
- 43. Inspection of materials will be done by the third party inspection agency fixed by the Thoothukudi Corporation.
- 44. It may clearly be noted that the Tender should accompany in this specified tender book with all necessary details and signed in Letter of Tender and Schedule.

- 45. As per clause 14.7A of the Tamilnadu Transparency n Tenders, Rules 2000, the criteria for evaluation and comparison of tenders shall also provide for a price preference of fifteen percent for domestic small scale industrial units and ten percent for the public undertaking of the Government in respect of products and quantities manufactured by them.
- 46. The tenders will be evaluated as per the Tamil Nadu Transparency in Tender Act 1998 and Tamil Nadu Transparency in Tender Rules 2000.

Corrupt or Fraudulent Practices

- 47. The Employer requires that Bidders observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Employer defines, for the purposes of this provision, the terms set forth below as follows
- 48. corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition or furnishing of false and fabricated documents
- 49. will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question:
- 50. will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Bank-financed contract. Further, Criminal proceedings will also be initiated against the Bidder/ Contractor.

SCOPE OF PROJECT

Scope of Work:

The successful System Integrator shall design, provide the VMS units of their own, install, development of web based application software, operate and maintenance of VMS device for the effective tracking, monitoring and management of vehicles of Thoothukudi corporation and also to check the water level in the water tankers at any point of time using the water level Sensors for the designated area/routes on hire basis for a period of one year. The online management system shall consist of following

VMS UNIT:

Providing the 192 vehicles with automatic vehicle locator devices. The Specification for VMS based vehicle mount device.

- **a**. Device Power input accepted range : $10V \sim 38V$
- **b**. IOT : Class 10 (up to 856 kbps)
- c. VMS shall be having minimum 16 channels.
- **d**. Tracking & acquisition sensitivity shall be minimum 159dBm.
- e. Device to have internal battery for 4 hours backup.
- **f**. Alerts for any tampering to the device should be generated in the backend system with proper logs.
 - g. Refresh rate shall be settable from 10 seconds onwards.
 - **h**. Device should be tamper proof. If any tampering attempted by the vehicleOperators predefined message should be sent to set of 10 mobiles with theVehicle number and the location.
 - i. The device should be IP 65 certified, PESO NOC to operate for O&G industries
 - **j**. Provision to integrate, RFID, Fuel sensor, safety voice announcement system and Dial a Tanker Application used by Thoothukudi Corporation.
 - k. Internal memory back up in the event of network or connectivity loss
 - **I.** Water level Sensor wire tamper detection of cut open or short circuit
 - m. Device software should be update via ICSP FOTA
 - n. Software for VMS to manage the Vehicles and provide timely reports installed in Cloud server. This is one time cost and will be extended to next 2 years without further additional cost.

2. Designing of Dash board as per requirement of Thoothukudi Corporation.

- **k**. Website to have all necessary map viewing facility such as zoom, pan, search a location jump to ward no. or zone no. etc.
 - **l**. Thoothukudi Corporation shall be able to add and remove their own landmarks through the website.

m. The System should have the
□Capability to track multiple vehicles
☐ Mapping of multiple vehicles
□Capability to add additional vehicles
□Ability to track in one-minute intervals
□Capability to set up geo fences for Vehicles. (The Predefined Routes will be provided by Thoothukudi Corporation)

- □ Ability to track vehicle after scheduled hours
 □ Ability to track speed and number of starts/ stops & idle running
 □ Ability to detect if vehicle is running or not
 □ Capability to track current location of vehicle
 □ Web access for tracking, reporting and viewing maps with vehicle location.
- n. Reports shall be possible considering Thoothukudi corporation added specifications.
- **o**. All the vehicles to be tracked on line and the location shall be possible on the tabular as well as map based view with the designated delivery points.
- **p**.Thoothukudi corporation can add the trip details and the report shall be possible to be captured through same.
- **q**. Thoothukudi corporation should be able to get the distance traveled of each vehicle in a day.
- r. Consolidated dashboard shall be provided to check the vehicle activity.
- s. There should be a facility for ear marking of routes (point to point, point to multipoint, circularetc) or the vehicle trips.
- t. The facility for addition/deletion of vehicle should be provided.
- **u**. There must be a playback facility for the traveled path of a chosen vehicle for a chosen period.
- v. Fuel consumption using fuel level sensor & Fuel analytical Report should be provided.

3. Water Level Sensor

- **a.** Three wire type
 - **b.** Supply reverse protection
 - c. Working voltage 12 to 36 V DC
 - **d.** Fully submerged type and able to give cm level accuracy in moving vehicle
 - e. Vehicle movement water waves should be averaged and stable water level has to be output
 - **f.** power consumption should be less than 2 watts
 - g. water proof detachable IP68 connector type for fixing in tractors
 - **h.** The sensor should have accelerometer to make the stabilization of data collection in moving vehicle.
 - **I.** Sensor should have self-cleaning mechanism to prevent the alge and sticky free moving particles IP 68 Certified IEC60529
 - **J.** The sensor should with stand all types water hardness confirming to ASTM -B117 standard
 - k. The sensor has to work in all types of weather conforming to IS9000-Pt5 Damp heat cycle

4. Deploying one human resource (1 member) in the Control Center at Thoothukudi Corporation

The responsibility of the Resources is to,

- 1. Monitor the System
- 2. Carry out Periodical Maintenance. The Periodic Maintenance schedule with the steps should be submitted in advance to Thoothukudi Corporation.
- 3. Replacing the Faulty Device with Spare one and service the Fault at the earliest.

- 4.Generate the MIS Reports and maintain a Register in both manual and digital form.
- a. Daily Reports
- b. Weekly Reports
- c. Monthly Reports
- **d**. Any other Reports as desired by the Thoothukudi corporation Officials as and when required.
- ☐ Mail the Exception Reports to the designated mail id's
- ☐ Escalate the Alerts to the Thoothukudi corporation Officials as directed.
- 4. Getting the Service Connection in the name of Thoothukudi corporation and settling the Airtime chargesfor the IOT connectivity promptly.
- 5. Train the Thoothukudi corporation Technical staff on the operation and maintenance of the proposed
- system hardware and software as an ongoing process.
- 6. Co-ordination with Thoothukudi corporation for smooth functioning of the system.
- 7. Provision of suitable disaster recovery mechanism for the software/data
- 8. Vendor has to supply all Equipment and devices and all other related equipment including software at their own cost. (Vehicle Tracking Device, VMS Antenna, IOTModem at Server, Water level Sensors and embedded software for the devices with interfacing applications for the IOT modem.)
- 9. The equipment which is to fixed on the vehicle should be rugged and tamper proof.SMS to the predefined numbers need to be sent if an attempt to tamper ishappening.
- 10. Thoothukudi corporation will provide power supply, space, systems, table and internet necessary infrastructure for control room.

Indicative list of Daily Reports

- 1) March-out report with time and march-out shortage of each Zone.
- 2) Report of vehicles idling for more than 3 days in each Zone.
- 3) Total distance covered by each vehicle of respective Zone.
- 4) Number of Trips & Tonnage made by each vehicle of respective zones.
- 5) KMPL Statement of each vehicle of each Zone. (The successful tenderer will begiven the Diesel filled up details of respective Zone vehicles from the diesel filing stationthrough mail at regular intervals)
- 6) Details of VMS units in operation and details of non-functioning
- 7) Details of tampered VMS units of each Zones.

Weekly Statement

1) KMPL Statement with tonnage and trips details / Vehicle-wise & Zone-wise.

Monthly Statement

- 1) Total distance covered by each vehicle of respective Zone.
- 2) Total number of Trips & Tonnage made by each vehicle of respective zones.

Note: Any other enhancement / parameter required by Thoothukudi Corporation, other than above mentioned works, if necessary, the service provider should be able to provide the same.

Service Description:

- 1. 24 hours 365 days system should be in operation.
- 2. Proactive monitoring, fault detection and management of the monitoring of vehicles using vms for reduced down time.
- 3. Fine tune of GSM / IOT technology for best response time. Live reading of each vehicle should be available on screen 24 hours in designated URL. The distance recorded in VMS should not have error exceeding 5% of actual distance covered by vehicle (recorded by the speedometer)
- 4. The agency should ensure that any change in map / Location data will not hamper the Software functionality.
- 5. Correlation with monitoring of vehicle movement data using vms performance for capacity planning. monitoring of vehicle movement using vms performance reports per installation basis (vehicle wise) application wise and user wise.
- 6. Company should replace the equipment whenever they stop working or start malfunctioning with the spare equipment during the Operation & Maintenance period within 48 hours. The faulty device should set right within 2 days.
- 7. Company should update the application software with the latest versions as and when available. The licensing of the application should be with Thoothukudi Corporation and any software used within the application is to be with proper licenses.
- 8. The equipment should be all weather, water proof and vibration proof.
- 9. The Agency should provide API for the monitoring software in the format prescribed by the Thoothukudi Corporation.(API Application Programming Interface)
- 10. The Period of Contract is one Year from the date of work order. Moreover, the performance of the said period will be reviewed by the department after completion of first 9monthsperiod and the period will be extended by the Corporation to further years based on the satisfactory performance of the successful tenderer if necessary.

Monitoring:

- 1. Reporting and reviewing process (content & frequency). The Operation & Maintenance resource of the agency will have to be present in the control room at Thoothukudi corporation during office hours of Thoothukudi corporation and in case of need, the performance would be reviewed on a fortnightly basis.
- 2. Vendor should train the officials of the Thoothukudi Corporation
- 3. The wages of the staff engaged on this project shall be borne by the vendor.
- 4. The wages for the staff shall be paid by the vendor as per prevailing labour laws.
- 5. The room, infrastructure, furniture & electricity will be provided by the Thoothukudi Corporation.

Submission of bills

Bills for every month shall be submitted not later than 15 days of the corresponding month failing which the penalty for late submission of bills amounting to Rs. 5,000/- shall be imposed. Bills shall be submitted with records for all the parameters for payment.

QUALIFICATION CRITERIA FOR THE BIDDERS

Eligibility Criteria

- 1. The company should have the experience of providing VMS/INS based Tracking System/Integrated Application solution for at least 3 years which includes design, installation, operation & maintenance of VMS based online management of vehicles with at least 2000 numbers (multiple orders) in any Government / Private sector and Water Level Sensor (one work order prior to 31-3-2021and working till date must be submitted as proof).
- 2. The Company should have sufficient technical skilled manpower having requisite experience to develop and implement customized I.T applications integrating VMS/ INS/ Web Technologies/Water Level Sensors.
- 3. The company should have successfully completed at least one similar project of single order value worth of minimum Rs.50 lakhs or above during the last three financial years for any Govt./Quasi Govt./PSU's. (A copy of the work completion certificate and the purchase order shall be attached as a supporting document, mentioning the total value of the work for last 3 years).
- 4. The Company should have proven experience in the area of development of customized applications integrating VMS Web Technologies/ Water Level Sensor.
- 5. Bidders should have a sound financial background. The Bidders should have a turnover of minimum 2 crores in each of the three financial years. Necessary audited Balance sheets (in case of the current financial year, unaudited balance sheet of the same should be submitted), proving above requirements are to be furnished with the bid. The tender shall submit the copy of certificate showing turnover certified by chartered accountant.
- 6. The website must be based on the maps which are approved by Govt. of India with a minimum scale of 1:10000. For Google map based solution bidder should attach a license from Google. If the bidder is using any proprietary maps then the user license for the same should be provided. The bidder shall own the complete design rights of the Web site.
- 7. The intended VMS device to be provided should be IP 65 certified.
- 8. The VMS device provider should be own manufacturer of VMS device (proof for manufacturer license to be provided)
- 9. The tenderer should have registered office in Tamil Nadu, India.
- 10. Bidder should attach list of manpower in their firm for at least 20 Persons on roll supported by the ESI or PF for the last year.
- 11. Copy of PAN card & GST registration certificate to be furnished.
- 12. The Manufacturers or the bidders have not been banned / blacklisted by any Government 'or' Semi-Government Department 'or' PSU during last three years. If the bidders or manufacturers have been banned, then this fact must be clearly stated. However, if this declaration is not furnished the bid shall be rejected.
- 13. All pages of the Bid including where entries or amendments have been made shall be signed by the person or persons signing the Bid and to be **scanned and submitted through E-Tender.**

- 14. All the copies of certificates in support of above should attested by Notary Public / Officers not below the rank of Executive Engineers.
- 15. The source software for the web, android and server will be provided by the Thoothukudi Corporation, the successful tenderer have integrate their VMS and the Sensor data with given source and make the system live and operational to meet Thoothukudi corporation operational requirements.

Note: Documentary evidence in support should be provided for the eligibility Criteria confirming for above conditions.

Submission of Bids

Sealing and Marking of Bids

intending bidder should submit tender in two cover system. The cover containing

EMD, GST clearance certificate, qualification Criteria and information etc., shall be super scribed as

"Technical Bid". Another cover containing the duly filled in tender schedule shall be super scribed as

"Price Bid". Both these covers shall be put in a single big envelope and shall be submitted.

The Cover superscripted as "Technical Bid" will be opened first. The Price Bid cover will be

opened only if the document required in the Technical Bid cover viz., EMD, GST clearance

certificate, work experience EMD exemption certificate(if applicable), etc., are found in order as per

the tender conditions. If Technical Bid is not submitted with these particulars, the Price Bid cover

will not be opened and the tender will be rejected and returned to the bidder "un opened"

The inner and outer envelopes shall

(a) Be addressed to the Employer at the following address:

The Commissioner.

Thoothukudi City Municipal Corporation,

113, Palai Road,

Thoothukudi – 628002.

Bear the following identification:

Contract for ProvidingVehicle Monitoring System (VMS) for Command and Control with Clear Performance Report for Waste Collection and other Engineering activities through

Corporation vehicles and Linear Water Level Sensor in Thoothukudi Corporation

Bid Reference No: E2/1114/2022

DO NOT OPEN BEFORE 15.30 hours on 31.05.2022

If the outer envelope is not sealed and marked as above, the Tender Inviting Authority will

assume no responsibility for the misplacement or premature opening of the bid.

Deadline for Submission of the Bids

Bids must be received by the **Tender Inviting Authority** at the address specified above not later than 15.00 hours on 31.05.2022. In the event of the specified date for the submission of

bids is declared a holiday, the Bids will be received up to the appointed time on the next

working day.

19.2 The Commissioner may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 9, in which case all rights and obligations of

the Employer and the bidders previously subject to the original deadline will then be

subject to the new deadline.

Late Bids

20.1 Any Bid received by the Tender Inviting Authority after the deadline will be returned

unopened to the bidder.

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Thoothukudi Corporation

Section – IV

FORM OF AGREEMENT

Articles	of	Agreement	made			this
		-	. <u>Hundred</u>	and	ninety	nine
					bet	ween
Thiru			her	einaft	er referr	ed to
as the contract	or which expression	on shall where the contex	t so admits	inclu	ide his	helrs,
executors, adm	inistrators and lega	al representatives of the	one part an	d the	Corpor	ration
(hereinafter cal	led the Departmen	t) which expression shall	where the	conte	xt so a	dmite
include its suc	cessors in office a	nd assigns) of the other	part. When	reas t	he contr	ractor
delivered to the	Department the ten	der which was opened on .			one thou	<u>usand</u>
nine hundred an	d ninety where by t	he contractor offered and u	ndertook to	carry	out the v	vorks
specified under	this contract and ac	cessory work in name of w	ork.			

In the state of Tamilnadu in India, and provide the works, materials matters and things described or mentioned in these presents at the prices set forth in the schedule annexed to such tender and the contractor also undertook to do all extra and varied works which might to ordered as part of the contractor on the terms provided for in the conditions and specifications hereto annexed and Department accepted such tender in pursuance where of the parties here have entered into this contract.

And whereas the contractor fully understands that on receipt of communication of acceptance of tender from the accepting authority, there emerges a valid contract between the contractor and Department represented by the officer accepting the agreement and the tender documents i.e., tender notice, letter of tender, bill of quantities and other schedule, general conditions to the contractor and special conditions of the tender, negotiation letter communications of acceptance of tenders, shall constitute the contract for this purpose and be the foundation of rights of both the parties, as defined clause of tender notice. Now hereby agreed that no consideration of payment of the said sum of Rs..... (Rupees.....) or such other sum as may be arrived at under the clause of the General conditions of the contract relating to payment of final measurement at unit prices, the contractor shall and well within the time specified in his letter of tender thoroughly and efficiently and in a good workman like manner perform, provide, execute and do all the works, materials matters of things incidental to or necessary for the entire completion of the works specified under this contract and necessary works including all works shown in the drawings hereinafter referred to or described or set forth the said specifications and schedule hereto annexed and in accordance with such further drawings and instructions as the Engineer of the Department or other Engineer duly authorized in that behalf thereinafter and in the annexed documents referred to as the Engineer) shall at any time in accordance with the said schedule (Bill of quantities) and specifications provide and give together, with any alternations in the works or additions thereto, in the time and manner in such schedule (Bill of quantities) and specifications stipulated to the entire satisfaction of the Engineer, and their successors covenant and agree with the contractor that during the

progress of the works and on the completion of contract to the satisfaction of the Engineer, the Department shall and will from time to time on receiving the certificate in writing of the Engineer, the Department shall and will from time to time on receiving the certificates in writing of the Engineer pay to the contractor according to such certificates and the terms of this contract subject nevertheless to deductions or additions thereto or there from which may be lawfully made under terms of this contract. It is hereby mutually agreed and decreed as follows.

- a) All certificates or notices or orders for items or for extra varied or altered works which are to be the subject of an extra or varied charge shall be in writing shall not be valid or binding or be of any effect whatsoever.
- b) The terms contract shall include these presents and the notice inviting tender, letter or tender, bill of quantities and other schedules general conditions and specifications hereto annexed and plans drawings herein and hereafter referred to.
- c) The arbitrator for fulfilling the duties set forth in the arbitration clause of the general conditions of the contract shall be.
- i) If the contractor claims that the decisions or the instructions of the Engineer/Department are unjustified and that accordingly, he is entitled to extra payments on account thereof he shall forthwith notify this to the Engineer/Department to record his decisions and reasons there for in writing and shall within two weeks state his claims in writing to the Engineer/Department thereafter. The Engineer/Department shall thereafter within four weeks of the receipt of the claim, reply to the points raised in the claim. Unless resolved by negotiation or discussions immediate thereafter within further four weeks the question of liability for such payment will be treated as a dispute.
- ii) Engineer/Department during the progress of the work, the mode or manner of the exercise of discretion shall not be a matter for arbitration.
- iii) The decision of the Engineer/Department shall be final, conclusive and binding on all parties to the contract upon all questions relating to the meaning of specifications, design, drawings and instructions, and as to the quality of workmanship or material used on the work or any matter arising out of or relating to the specifications, designs and drawings and instructions concerning the works or the erection of or failure to execute the same arising during the course of works. The above shall not be the subject matter of arbitration and in case shall the work be stopped consequent on such a dispute arising and the work shall also be carried out by the contractor strictly in accordance with the instruction of the Engineer/Department.
- iv) In case any question, difference or dispute shall arise on matters other than sub clauses (ii) and (iii) and above and except any of the "exclude matters" mentioned in clause 24 touching the construction of any clause herein contained on the rights, duties and liabilities of the parties hereto or any other way touching or arising out of these presents the same shall.
- a) In cases where the total value of claims, under the contract is less than and uptoRs. 50,000/- be referred to the interpretation decision and award of a Superintending Engineer of the Department at the sold Arbitrator whose decision shall all be final and binding on the parties to the contract.

- b) In case where the value of claims is more than Rs. 50,000/-the parties will seek remedy through the competent civil court having local jurisdiction.
- c) The provisions of the India Arbitration and Reconciliation Act 1998 and the rules there under the statutory modification thereof shall be deemed to apply to such reference and deemed to be incorporated in the contract. The arbitrator shall state the reasons for the award.
- d) Provided always the contractor shall not except with the consent in writing of the Engineer in any way, delay carrying out works with all the diligence and shall until the decision of the Engineer/Department and no award of the Arbitration/Competent Civil court shall relieve the contractor of hi obligations to adhere strictly to the instructions of the Engineer/Department with regard to the actual carrying out of the works.
- e) Time shall be considered as essence of the contract and the contractor hereby agrees to commence the work within 30 days from the date of acceptance of his tender by the Department complete the work within. Three/Six/Nine months and to show progress at the stipulated rate subject nevertheless to the provisions for extension of time contained in clause 57 of the general conditions of contract.

In witness where of the contract On behalf of the Department have

caused there common seal to be affixed the day and delivered by the said.	and year first above written. Signed, sealed
	In the presence of
	Signature of Contractor
	Name and seal.
Signature, Name and Designation of work.	

Signed, by on behalf of Municipal corporation/Municipality / ULB Signed, Name and Designation of witness.

Commissioner	Thoothukudi	Corporation /

SECTION V

LETTER FOR NEGOTIATION

In pursuance of negotiation with the Commissioner, of Thoothukudi Corpora					
on					
I/We agree	I/We agree to reduce the rates for the items in the Scheduled s follows.				
Sl.No.	Item No. in the Schedule	Reduced rate per unit			
		Signature of contractor.			

SECTION-VI

FORM FOR EXTENSION OF TIME

1.	Name	of work as in A	Agreement	:		
2.	Estima	nte No. and am	ount	:		
3.	Estima	ite value put to	tender	:		
4.	Agreei	ment No. and a	amount	:		
5.	Date o	f handling ove	r of site	:		
5.	Date fi	ixed for compl	etion	:		
7.	Extens	sion of time alr	eady granted	:		
Reasor	ns					
Extens	sion	Executive Engineer's Reference No. andDate	Period	Due to contractor	Due to Due to Depart- ment	natural calamities
	Extens Extens					
Copie	es of ord	lers shall be en	closed)			
3.				applied for by co	ontractor.	
						Reasons
Extens	sion	Executive Engineer's Reference No. and Date	Period	Due to contractor ment	Due to Depart-	Due to natural calamities
1.						
2.						

3.

9.	Exter	nsion time now recommended :	
10.	a)	Remarks for the justification for Recommendation of extension of Time (If not recommended as Requested by the contractor, Reasons for rejection or Shortening the duration)	
10.	b)	Whether any penalty has been Imposed already :	
11	For tl	ther any penalty has been proposed the delay cause due to the hindrance e contractor	
12.	Whet Refu	ther any penalty imposed is to be nded :	
13.		arks regarding the progress shown by ractor after imposing penalty :	
14.		ils of extra work and amount involved itional item, etc.,)	:
	(a)	Total value of extra work :	
	(b)	Proportionate period of extension of Time based on estimated amount put to Tender on account of extra work :	
15.	Total	extension of time required for 9 and 14:	
Date:			Executive Engineer Thoothukudi Corporation

SECTION 7: BILL OF QUANTITIES

Bill of Quantities

	Description of item]	Rate		
Sl. No.	(with brief specification and reference to Book	Quantity	Unit	In figures	In words	Amount	
	of specification)			<i>Q</i> 1			
		Total Bid Price	(in figures)				
		Total Diu 1 HC	(in words)				
	(iii worus)						

Note:

- (1) Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities (refer: ITB Clause 13.2 and GCC Clause 43.3).
- (2) Unit rates and prices shall be quoted by the bidder in Indian rupee [ITB Clause 14.1].
- (3) Where there is a discrepancy between the rate in figures and words, the rates in words will govern. [ITB Clause 27.1(a)]
- (4) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 27.1 (b)].

LETTER OF CONSENT

"I AGREE TO ABIDE BY ALL THE STANDART CONTRACT TERMS AND CONDITIONS NOTIFIED BY THE CE WHICH I HAVE AND UNDERSTOOD".

"I CERTIFY AND CONFIRM THAT NONE OF MY FAMILY MEMBERS (FAMILY AS DEFINED IN THE CORPORATION ACT) ARE HOLDING ANY OFFICE IN THE CORPORATION.

CONTRACTOR

'A'-Schedule

"A" - Schedule Form

Name of work:- Contract for ProvidingVehicle Monitoring System (VMS) for Command and Control with Clear Performance Report for Waste Collection and other Engineering activities through Corporation vehicles and Linear Water Level Sensor in Thoothukudi Corporation

	Estimate No.:- 7/22-23/AEE(ES) File No: E2/1114/2022						
SI.				Rate in			
No.	Qty.	Description of Work	Unit	Figures	Wards	Amount in Rs.	
1	1 Nos	a) Providing, installation and Monitoring of VMS Server software as one time cost for 1 Year period as per standard and as directed by the dept. officers.	Each				
	2200 Nos	b) Providing and installation of VMS Devices for Monthly Rental basis as per standard and as directed by the dept. officers.	Each				
	60 Nos	c) Providing and installation of Water Level Indicator Sensor unit in monthly rental basis as per standard and as directed by the dept. officers.	Each				

Address:

Challan No: Contractor's Signature