

Name of Work_CP-24: Design/Engineering, Construction, Commissioning of Centralized SCADA Centre for Monitoring & Control of Water Treatment Plants and Distribution System, Sewerage SCADA for Monitoring of all Sewerage Facilities of BWSSB with Comprehensive Operations and Maintenance of Seven (7) Years

PREBID REPLY TO BIDDERS QUERY



Sr. No.	Tender In	Location in Document	Page No.	Text in Tender	Query / Suggestion	BWSSB REPLY
01		Vol 1	5	Bids (Technical and Financial) Original - 2 Copies, must be delivered to the address given above (in para 4) on or before the date and time specified in the schedule below	We understand bid can be delivered by hand to the mentioned address before the prescribed time, please confirm	Confirmed
02		Vol 1-Section III Evaluation and Qualification Criteria 1.1.2 Equipment-9	23	Panel Manufacturing facility-CNC punch press/Laser cutting machines, CNC bending machine, Laser welding machine, CNC gasket machine	This facility will not be available with any EPC Contractor. This is available and maintained by Panel manufacturers only. The clause will restrict the competition. We request you to kindly delete this clause.	As per bid conditions
03		Vol 1- 2.3.2 Average Annual Turnover	30	Minimum average annual turnover of USD 11 Million calculated as total certified payments received for contracts in progress and / or completed, within the last 5 years divided by 5 years.	Turn over should be from Water Supply / Sewerage Automation Projects only. We request that the clause be amended accordingly	The Contracts here means relevant contracts
04				Joint Venture	Please mention maximum no of JV members allowed for making JV for this tender	There is no specific restriction on the number of JV members
05		2.4.2 (d) Specific Experience Instrumentation	36	The bidder shall have NABL certified testing & calibration laboratory /Testing & calibration laboratory as per ISO/IEC 17025 for Flowmeter cum transmitter, Pressure Transmitter, and shall demonstrate experience in the role of Prime Contractor (Single entity or JV member for installation & commissioning of minimum 25 Electromagnetic Flowmeters (Instrumentation) in the distribution network in a single project	This is a certification that is needed and taken by the manufacturer / OEM of flow meters, pressure transmitters etc. As the Bidder or EPC procures the same as one of the components the same is not needed to be obtained by the Bidder / EPC as they do not manufacture flow meters. The requirement may kindly be modified as below "The bidder / OEM for flow meters shall have NABL certified testing & calibration laboratory / Testing & calibration laboratory as per ISO/IEC 17025 for Flowmeter cum transmitter and the bidder/OEM shall demonstrate experience in the role of Prime Contractor (Single entity or JV member for installation & commissioning of minimum 25 Electromagnetic Flowmeters (Instrumentation) in the distribution network /sewerage system in a single project"	As per bid conditions
06		Notes for the Applicant	37	The Bidder shall be essentially an original Equipment Manufacturer (OEM) for SCADA software & Automation (PLC) hardware or shall be an Authorized System Integrator/authorized specialist sub-contractor for the OEM for a minimum continuous period for minimum last 10 years period.	This is a restrictive condition and we request the same to be deleted in the interest of healthy competition. In lieu we request that an authorization from the OEM authorizing the Bidder to quote with their products be kindly accepted	As per bid conditions
07		Notes for the Applicant	37	Note: Only one system integrator/authorized specialist sub-contractor per OEM shall be allowed for bidding. If more than one specialist sub-contractor/system integrator for the same OEM shall bid, such bids shall be rejected.	This is a restrictive condition and we request the same to be deleted in the interest of healthy competition. In lieu we request that an authorization from the OEM authorizing the Bidder to quote with their products be kindly accepted	As per bid conditions
08		Section VIII - Particular Conditions of Contract- 4.2 Reductions in Performance Security from the end of	100	40% of Performance Security for the design shall be returned at the end of the Retention Period	Please clarify when the retention period will be completed for this purpose	Retention Period is 1 year from the completion of Design Build period.
09		Section VIII - Particular Conditions of Contract - 9.6 Delay damages	101	0.1 % of the Accepted Contract Amount for the Design-Build Period for every day of delay.	We request force majeure clause to be included in the tender to safe guard contractor and Client	It is already included under GCC Clause No 18, Exceptional Risks
10		Section VIII - Particular Conditions of Contract 13.5 (b)	101	Percentage rate to be applied to Provisional Sums 5%	Please elaborate the meaning of provisional sums and the details of the same for this contract	The same is explained clearly in GCC Clause No 13.5. Bidder to refer the same
11		Section VIII - Particular Conditions of Contract- 14.1 The Contract Price	113	The amount of applicable Goods & Services Tax (GST) will be paid separately to the Contractor with each bill at the time of payment	Please clarify if the Bidder should quote rates inclusive of all taxes and duties or the Client will pay the taxes such as GST etc over and above the quoted rates	Please refer Bid Data sheet Clause No ITB 18.7
12			126-129	Payment schedule	We request you to please elaborate the payment schedule for a. Payment on supply of materials b. Payment on installation of materials c. Payment on commissioning & Go live	As per Bid document
13		Vol 2 - 1.4 Description and Scope of Work	6	The contractor shall co-ordinate with the existing CSC O&M contractor and take complete handover of the existing system including all of its ancillaries systems, hardware, and installed remote wireless GPRS communication equipment from the existing O&M contractor.	It is understood that since the existing contract period is still not over and the existing contractor shall on a "No Cost" basis provide handover of all equipment of the earlier contract in "working condition. In addition the existing contractor shall provide the necessary technical support on a "No Cost" basis for effective and acceptable migration of the old system to the new envisaged system. Please confirm the above is correctly understood	1) Confirmed The existing contractor shall handover of the existing system to BWSSB and return BWSSB shall handover the system to the successful bidder. 2) Confirmed The successful bidder shall co-ordinate with the existing contractor and obtain the necessary information
14		Vol 2 -1.4 Description and Scope of Work	6	Upon taking over of the entire system, the contractor shall operate and maintain the entire system till the old system is migrated to the new centralized SCADA system with required manpower	Please provide the BOQ / Scope of the existing system and status of each component to assess the cost that must be considered towards maintaining the old (nearly ten years old) system	The successful bidder shall operate and maintain the current system till the old system is migrated to the new centralized SCADA system with required manpower. The contractor is encouraged to visit the site and obtain the details as required. The current system architecture of the existing system



15				Water SCADA. The water SCADA system shall integrate all existing water treatment facilities at T K Halli (all stages) & T G Halli locations (currently plant is under construction and data shall be integrated on completion). Water pumping stations at T K Halli, Harohalli and Tataguni locations (all stages), inclusive of the surge vessel locations, all Ground level reservoirs (GLR 's) of BWSSB. The above facilities shall be integrated with the centralized SCADA server.	Please provide the expected completion date for the sites which are under construction as on date	The tentative dates are as below 1 CP-02-March 23, 2 CP-03 March 23, 3 CP-04-March 23, 4 CP-07 April 23, 5 CP-08 April 23, 6 CP-09 February 23, 7 CP-10 April 23
16	Vol 2 - 1.4 Description and Scope of Work - 6,7,8	7	6) T K Halli Location. The contractor under this contract shall provide the FOC integration panel, wireless communication modules and integrate the following facilities 7) Harohalli Location. The contractor under this contract shall provide the FOC integration panel, wireless communication modules and integrate the following facilities 8) Tataguni Location. The contractor under this contract shall provide the FOC integration panel, wireless communication modules and integrate the following facilities	We understand that Fiber Optic Cable has already been laid at these locations and contractor has to provide FOC integration Panels and integrate with SCADA System only. Please confirm our understanding is correct	The bidder understanding is "Not Correct". The bidder shall note that only FOC cable ducts/pipes required for laying of the FOC are being laid under various ongoing contracts along the main pipeline route from T K Halli to Vajrahalli. The contractor scope of work shall include design, supply, installation of FOC cables in the FOC ducts, laying of FOC cables and ducts from the main cable duct/pipe up to the individual stations. FOC integration panel and integration with the local control systems and field instruments at these locations with all required hardware to achieve integration of data and equipment.	
17	Vol 2 - 1.4 Description and Scope of Work - 6,7,8	8	Network visualization - shall include both Geographic view and schematic view.	Please elaborate methodology to be used for the Geographic Visualization	It shall be with google earth and survey with total station to achieve accurate network visualization. Shall be integrated with BWSSB GIS system.	
18	Vol 2 - 1.4 Description and Scope of Work - 6,7,8	9	The contractor scope of work shall include integration with existing servers (UFW SCADA server, Bulk flowmeter server, etc). The contractor shall integrate all the data from the existing servers at the existing control center.	Please provide the details such as system configuration, database used and Please confirm that the same shall be made available to the successful bidder on a "No Cost" basis by the existing solution implementation / maintenance company	The same shall be provided on no cost basis. The current system configuration is attached.	
19	Vol 2 - 1.4 Description and Scope of Work - 6,7,8	9	Sewerage SCADA-The contractor scope of work shall include migration & integration of all existing STP which are integrated with the existing sewerage SCADA server.	Please provide the details such as system configuration, database used and Please confirm that the same shall be made available to the successful bidder on a "No Cost" basis by the existing solution implementation / maintenance company	The same shall be provided on no cost basis.	
20	Vol 2 - 1.4 Description and Scope of Work - 37	14	37) Design, supply installation, testing and commissioning of redundant Fibre optic Communication network from T K Halli to Vajrahalli Junction. Note: The FOC ducts required for laying the FOC cabling are being installed under various pipeline contract.	a. Please provide approximate route and quantity required for laying fibre optic cable. b. Please provide the route map of already laid FOC ducts. This will enable the bidders to evaluate and quote for the same.	A. For the route map, please refer drawing ONTB BWSSB(3)-CP24-CSC-008 B. For the route map, please refer drawing ONTB BWSSB(3)-CP24-CSC-008 The FOC ducts laying is currently under progress under various contracts. Please refer to earlier reply to the expected date of completion for various contracts.	
21	Vol 2 - 1.4 Description and Scope of Work - 37	18	Note: Scope of work shall also include construction of flowmeter chambers for all the flowmeters. Contractor shall note that all the flowmeter locations are "LIVE Locations i.e in service condition".	Please provide the drawings and detailed specification of the chamber work (as per the flow meter size) to be done at site for the flow meter installations.	Refer Addendum-1	
22	1.5 Ground Level Reservoirs (GLR) to be integrated with Centralized SCADA Center	18	Integration panel comprising of Standalone PLC with 8" touch panel color Human machine interface (HMI),	Kindly keep the size of Touch Panel (HMI) as 7" x 7" is widely manufactured by most of the OEMs.	Bidder to consider 10" touch panel HMI if 8" is not available.	
23	1.5 Ground Level Reservoirs (GLR) to be integrated with Centralized SCADA Center, 6		UPS system for all field instrumentation and automation, communication equipment installed as part of this contract. Minimum 1 KVA UPS system shall be installed, however if more than 1 KVA load is required, the same shall be provided at no extra cost to BWSSB.	Kindly allow DC UPS to be provided as an option.	Confirmed.	
24	1.7 Online Realtime Flow & Pressure Measurement At Strategic Locations In The Water Distribution Network	18	Flow measuring devices comprising of battery operated Electromagnetic flowmeters cum transmitters and data loggers, pressure transmitters at key locations in the water distribution network pipelines. The output of the same shall be transmitted in real time to the centralized SCADA system.	Please confirm that the accumulated reading of flow from the battery operated flow meter shall be acceptable. We foresee a substantial element of confusion as some reading will be real time while some will be of past (as the battery operated flow meter only send readings once or twice in every 24 hours cycle).	As per bid conditions. In battery powered, though the number of transmission are limited, the data interval for store and forward is envisaged as 15 minutes. Thus effectively the real time data at shorter interval is acquired.	
25	Panel Enclosure	16-24 and other locations	IP 68 Panel Enclosure	Please note that IP 68 enclosure panels are not manufactured by any manufacturer of Control Panels and hence we request you to kindly revise the specification to a practically implementable one.	Bidder to consider IP-65	
26	Staffing Requirements	1.9, Page 21	The staffing schedule shall be prepared for operating the centralized SCADA center on a 24 hour per day basis with two equal shifts during the complete 84 month comprehensive O&M contract period.	Please note that as per the government guidelines a shift can be a maximum of 8 hours and weekly off must be provided to all employees. For the purpose of receiving bids at par please specify the staff expected to be during the O&M period as a "minimum requirement" with "minimum qualifications" as per government labour guidelines.	Staffing during the comprehensive O&M period should be on a 24 hour per day basis. The deployment of manpower will be as per government norms.	
27	1.12, Access for Other Contractors	1.9, Page 21	If the work of the Contractor is delayed because of any acts or omissions of any other contractor, the Contractor shall have no claim against the Employer on that account other than for an extension of time.	Please note that no bidder can take responsibility of timely completion of work of other contractors. We would suggest deletion of this requirement.	No delay damages will be levied on the Contractor under such circumstances. However in similar lines no claims will be accepted from the Contractor other than Time Extension.	
28		1.9, Page 21	Details of other contracts taking place on the same Site or adjoining the Site or being simultaneously executed are as follows: Contract No. Existing Raw Water Transmission Main. Contract for the construction of the raw water pipeline to the treatment plant. Contract No-CP-02: Water Treatment Plant at TK Halli (775 MLD output Water Treatment Plant with all necessary Electrical, Mechanical, Instrumentation, SCADA etc.)	Please provide the necessary details of the scope of instrumentation and SCADA system being executed in these contracts so that bidders can get a clear idea of the scope of integration that they must consider as a part of the envisaged contract and bids submitted shall be at par. We would also suggest a site visit to be done at the sites where the work is completed / in progress to get an assessment of integration. This will enable the BWSSB to receive at par bids.	The scope of works at each of the mentioned locations comprise of PLC based SCADA systems with field instrumentation for Water treatment plant, pumping station, field instrumentation and automation for Intake structure which shall communicate to the WTP.	
29	Part 2- General Requirement 2.1.3 Specification	44	The contractor shall submit with his bid a detailed and substantive specification of all equipment (in six copies) and shall also give full particulars of the spare parts of the proposed plants & equipment, electric equipment, instruments and other appurtenant.	In volume -1 it is mentioned as original bid + 2 copies to be delivered, please confirm how many additional copies to be submitted along with original bid.	It is Original + 2 Copies.	
30	2.8 Programme Details	56	No extension of time will be granted by the Employer in respect of inclement weather or its effects (such as floods or droughts), fire or industrial disputes, unless such events could not reasonably have been foreseen by an experienced Contractor. All allowances to guard against such delays shall be clearly indicated in his programme.	Floods, droughts fire or industrial disputes, are not in the bidders or the client's control. In addition they are impossible to predict. Please include Force Majeure clause to cover the same.	The Exceptional Risk Clause is included in GCC 18.	
31	Key Milestones to be met by Contractor, 2.2	57	Implementation and GoLive & Android/iOS App	The progress expected is 100% in 03 months as per the chart. There seems to be an error, please rectify.	As per bid conditions. This involves design and implementation of project management module and online document system, which is required to be fully implemented to enable BWSSB to monitor and execute the project from the start of the contract award period.	



32	2 12 Photographs	62	In accordance with the requirements of the Conditions of Contract the Contractor shall supply negatives of photographs and unmounted positive colour prints not less than 250 x 200 mm of such portions of the Works, in progress and completed, as may be directed by the Engineer and specified herein. The negatives and prints shall not be retouched. The negative of each photograph shall be the property of the Employer and shall be delivered to the Engineer with the prints. No prints of these negatives shall be supplied to any other person without the written permission of the Engineer.	Please accept digital format media for the same	As per Bid conditions
33	2 13 Site Labour and Supervision	63	The Contractor shall not remove any supervisory staff or skilled labour from the Site without the Employer's prior approval	The condition is not practical Please consider deletion of the same	As per Bid conditions
34	2 21 Contractor's Office and Stores	66	The Contractor shall be responsible for the provision and sufficiency thereof of his Site-office and storage facilities as would be necessary throughout the execution of the Works	Please allow for storage at predefined and demarcated BWSSB premises for the equipment related to this work	As per bid conditions Bidder has to make his own arrangements for the same
35	2 24 Delivery, Loading, Unloading and Storing at Site	67	Delivery, Loading, Unloading and Storing at Site	We understand storage facility shall be provided by BWSSB. Kindly confirm	As per bid conditions Bidder has to make his own arrangements for the same
36	3 1 Vendor Qualification Criteria	86	Note-2: The contractor shall note that the approved vendor list indicated in particular requirements elsewhere in the specification, is only for the product make indicated. The contractor shall ensure that the make meets the technical specifications as specified in the technical specifications.	We understand that makes alternate to the ones in the provided Vendor List can be suggested and will be approved by the Client for use in the work Please confirm that our understanding is correct.	The bidder can suggest alternate vendors as per the applicable clause's and requirements in the specifications during detailed engineering stage
37	3 2 Management Information System (MIS)	87	a. The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of not less than Ten Million INR. b. Agency shall also submit bank solvency Certificate of not less than Ten Million INR issued by Nationalized bank	Please confirm if these are qualification conditions and if non compliance will be a reason for rejection of the Bid	The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
38	3 3 Instrumentation (Level, Flowmeters -GLR)-System Integrator	87	The agency should have minimum 15 years of experience in India in the field of instruments supply, installation, testing & commissioning and operation and maintenance of instruments in plants as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing control systems from different manufacturers as well as coordination with multiple agencies for contract execution. The agency shall be an authorized channel partner for the instrumentation equipment for minimum two years. Verification certificates signed not less than the country head of OEM shall be submitted as part of vendor credentials submission.	Please note that the contract may be bid for by an EPC in which case the bidder may not necessarily be a manufacturer for various equipment like instrumentation etc. For such a bidder this condition is irrelevant as he can procure equipment from various OEMs on basis of the technical requirements of individual projects. It may also be noted that all the OEMs as per Vendor List do not appoint any System Integrators / authorized channel partners as a business practice. They do however sell their products to EPC who approach them for the same. We find this a restrictive requirement that will limit fair competition and request you to kindly delete the same.	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
39			The agency shall have executed & completed at least ten individual project's with minimum all of the instruments (Electro-magnetic flowmeter/Insertion Type Flowmeter, Ultrasonic level Transmitter) for GLR or water distribution network within India or outside India during the last five years period, inclusive of supply, installation, testing & commissioning and operation and maintenance period of minimum 1 year within India or outside India with any government organization/utility.	Please note that most OEMs do not execute projects as a business practice. Hence the OEM will not be able to produce the required documentation. It is the EPC who has the experience of having provided the required instruments and maintained the same. We request that this experience be verified from the Bidder than from the OEM.	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
40			The agency shall demonstrate that it has service and calibration facility with trained service engineers (minimum 10 Engineers trained by OEM) available and are full time employees of the agency	Please note that looking at the total quantum of requirement of these products and the expected engineers is very high. The staff trained by OEM will be needed on commissioning of the work and in case of an EPC they will be the employees of the EPC itself. We request that the successful Bidder be allowed to submit an undertaking to provide the suitable number of trained staff.	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
41	3 4 Instrumentation (Flowmeters & pressure - Distribution Network, Sewage Network) - System Integrator	88	The agency should have minimum 15 years of experience in India in the field of instruments supply, installation, testing & commissioning and operation and maintenance of instruments in plants as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing control systems from different manufacturers as well as coordination with multiple agencies for contract execution. The agency shall be an authorized channel partner for the instrumentation equipment for minimum two years. Verification certificates signed not less than the country head of OEM shall be submitted.	Please note that the contract may be bid for by an EPC in which case the bidder may not necessarily be a manufacturer for various equipment like instrumentation etc. For such a bidder this condition is irrelevant as he can procure equipment from various OEMs on basis of the technical requirements of individual projects. It may also be noted that all the OEMs as per Vendor List do not appoint any System Integrators / authorized channel partners as a business practice. They do however sell their products to EPC who approach them for the same. We find this a restrictive requirement that will limit fair competition and request you to kindly delete the same.	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
42			The agency shall have executed & completed at least ten individual project's with minimum all of the instruments (Electro-magnetic flowmeter with data logger, Pressure Transmitter, Wireless communication network) for water distribution network /sewerage network within India or outside India during the last five years period, inclusive of supply, installation, testing & commissioning and operation and maintenance period of minimum 1 year within India or outside India with any government organization/utility	Please note that most OEMs do not execute projects as a business practice. Hence the OEM will not be able to produce the required documentation. It is the EPC who has the experience of having provided the required instruments and maintained the same. We request that this experience be verified from the Bidder than from the OEM.	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
43			The agency shall demonstrate that it has service and calibration facility with trained service engineers (minimum 10 Engineers trained by OEM) available and are full time employees of the agency	Please note that looking at the total quantum of requirement of these products and the expected engineers is very high. The staff trained by OEM will be needed on commissioning of the work and in case of an EPC they will be the employees of the EPC itself. We request that the successful Bidder be allowed to submit an undertaking to provide the suitable number of trained staff.	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.

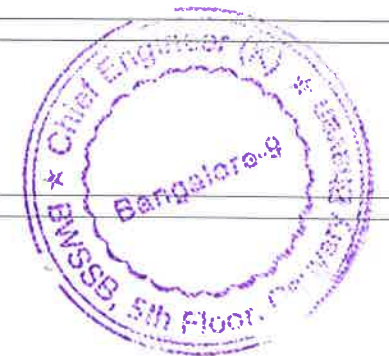
44		3.5 On-line Real Time Water Quality Multi Parameters Instrument In Water Distribution Network- System Integrator	88	The agency should have minimum 15 years of experience in India or outside India in the field of instruments supply, installation, commissioning and operation and maintenance of instruments in plants and minimum seven years of experience in the field of On-line Real Time Water Quality Multi Parameters Instrument design, supply, installation, testing & commissioning as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing instrument systems from different manufacturers as well as coordination with multiple agencies for contract execution	Please note that the contract may be bid for by an EPC in which case the bidder may not necessarily be a manufacturer for various equipment like instrumentation etc For such a bidder this condition is irrelevant as he can procure equipment from various OEMs on basis of the technical requirements of individual projects It may also be noted that all the OEMs as per Vendor List do not appoint any System Integrators / authorized channel partners as a business practice. They do however sell their products to EPC who approach them for the same. We find this a restrictive requirement that will limit fair competition and request you to kindly delete the same	As per bid conditions The successful bidder upon contract award shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
45			89	The agency shall be an authorized channel partner for the instrumentation equipment proposed for minimum three years from the date of bid. Verification certificates signed not less than the country head of OEM shall be submitted	Please note that most OEMs donot execute projects as a business practice. Hence the OEM will not be able to produce the required documentation It is the EPC who has the experience of having provided the required instruments and maintained the same We request that this experience be verified from the Bidder than from the OEM	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
46				The agency shall submit documentation that its registered with any Government utility within India or outside India The agency shall have executed & completed at least ten individual project with minimum 10 multi parameters instruments within India or outside India during the last five years period, inclusive of supply, installation, testing & commissioning and operation and maintenance period of minimum 1 year within India or outside India with any government organization/utility	1. Please clarify the meaning of "registered with any Government utility within India or outside India" 2. Will it suffice to produce proof that the OEM products have been used in any Government utility within India or outside India? We request that this experience be verified from the OEM instead of Agency or the Bidder	1. Shall read as " approved " 2. As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
47				The agency shall demonstrate that it has service and calibration facility with trained service engineers available and are full time employees of the agency	The staff trained by OEM will be needed on commissioning of the work and in case of an EPC they will be the employees of the EPC itself We request that the successful Bidder be allowed to submit an undertaking to provide the suitable number of trained staff.	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
48		3.6 On-line Real Time Influent & Effluent Sewage Quality Multi Parameters Instrument- System Integrator	89	The agency should have minimum 15 years of experience in India in the field of instruments supply, installation, commissioning and operation and maintenance of instruments in plants and minimum seven years of experience in the field of On-line Real Time Water Quality Multi Parameters Instrument design, supply, installation, testing & commissioning as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing instrument systems from different manufacturers as well as coordination with multiple agencies for contract execution. The agency shall be an authorized channel partner for the instrumentation equipment proposed for minimum three years from the date of bid. Verification certificates signed not less than the country head of OEM shall be submitted. The agency shall submit documentation that its registered with any Government utility within India or outside India The agency shall have executed & completed at least ten individual project with minimum 10 multi parameters instruments within India or outside India during the last five years period, inclusive of supply, installation, testing & commissioning and operation and maintenance period of minimum 1 year within India or outside India with any government organization/utility	Please note that the contract may be bid for by an EPC in which case the bidder may not necessarily be a manufacturer for various equipment like instrumentation etc For such a bidder this condition is irrelevant as he can procure equipment from various OEMs on basis of the technical requirements of individual projects It may also be noted that all the OEMs as per Vendor List do not appoint any System Integrators / authorized channel partners as a business practice. They do however sell their products to EPC who approach them for the same. We find this a restrictive requirement that will limit fair competition and request you to kindly delete the same	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
49				The agency shall be an authorized channel partner for the instrumentation equipment proposed for minimum three years from the date of bid. Verification certificates signed not less than the country head of OEM shall be submitted	1. Please clarify the meaning of "registered with any Government utility within India or outside India" 2. Will it suffice to produce proof that the OEM products have been used in any Government utility within India or outside India? We request that this experience be verified from the OEM instead of Agency or the Bidder.	1. Shall read as " approved " 2. As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
50				The agency shall submit documentation that its registered with any Government utility within India or outside India The agency shall have executed & completed at least ten individual project with minimum 10 multi parameters instruments within India or outside India during the last five years period, inclusive of supply, installation, testing & commissioning and operation and maintenance period of minimum 1 year within India or outside India with any government organization/utility	The staff trained by OEM will be needed on commissioning of the work and in case of an EPC they will be the employees of the EPC itself We request that the successful Bidder be allowed to submit an undertaking to provide the suitable number of trained staff.	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
51				The agency shall demonstrate that it has service and calibration facility with trained service engineers available and are full time employees of the agency	The staff trained by OEM will be needed on commissioning of the work and in case of an EPC they will be the employees of the EPC itself We request that the successful Bidder be allowed to submit an undertaking to provide the suitable number of trained staff.	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
52		3.7 Fire Detection, Alarm & Suppression System Integrator.	89	The agency should have minimum 15 years of experience in India in the field of Fire alarm ,detection and suppression equipment for control center as required under this contract for supply, installation, commissioning and operation and maintenance of the same as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing the fire alarm systems from different manufacturers as well as coordination with multiple agencies for contract execution The agency shall be an authorized channel partner for the Fire detection, alarm and suppression system proposed for minimum three years from the date of bid. Verification certificates signed not less than the country head of OEM shall be submitted. The agency shall furnish a brief write-up, backed with adequate data, explaining its available capacity and experience (both technical and commercial) for the execution of the proposed scope of work within the specified time of completion after the meeting all their current commitments	Please note that the contract may be bid for by an EPC in which case the bidder may not necessarily be a manufacturer for various equipment like instrumentation etc For such a bidder this condition is irrelevant as he can procure equipment from various OEMs on basis of the technical requirements of individual projects It may also be noted that all the OEMs as per Vendor List do not appoint any System Integrators / authorized channel partners as a business practice. They do however sell their products to EPC who approach them for the same We find this a restrictive requirement that will limit fair competition and request you to kindly delete the same	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
53				The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Five Million INR. Agency shall also submit bank solvency Certificate of not less than Five Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works



54	3.8 Interior Design Works for Centralized SCADA Center	91	The contractor shall appoint an agency to carry out all interior design, modification works for the centralized SCADA center as per the requirements of the specification. The agency should have minimum 15 years of experience in India or outside India in the field of interior design works for large control center's required under this contract for supply, installation, commissioning and operation and maintenance of the same and shall demonstrate capability and resources for integrating/interfacing the systems from different manufacturers as well as coordination with multiple agencies for contract execution. The agency shall furnish a brief write-up, backed with adequate data, explaining its available capacity and experience (both technical and commercial) for the execution of the proposed scope of work within the specified time of completion after the meeting all their current commitments. The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Ten Million INR. Agency shall also submit bank solvency Certificate of not less than Ten Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
55	3.9 Centralized air conditioning system and Precision air conditioning system	92	The agency on a minimum shall be operating under an accredited ISO 9001:2015 systems. The agency should have minimum 15 years of experience in India in the field of Centralized air conditioning system and Precision air conditioning system for control center as required under this contract for supply, installation, commissioning and operation and maintenance of the same for control center as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing the air conditioning systems from different manufacturers as well as coordination with multiple agencies for contract execution. The agency shall furnish a brief write-up, backed with adequate data, explaining its available capacity and experience (both technical and commercial) for the execution of the proposed scope of work within the specified time of completion after the meeting all their current commitments. The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Five Million INR. Agency shall also submit bank solvency Certificate of not less than Five Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
56	3.10 Cyber security of the centralized SCADA center with Software Firewall & hardware firewall	92-93	The agency on a minimum shall be operating under an accredited ISO 9001:2015, 27001:2015 systems. The agency should have minimum 10 years of experience in India in the field of providing Cyber security implementation both IT and OT which shall include supply, installation, commissioning and operation and maintenance of the same for control center's as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing the cyber security system with all systems which are connected (both IT and hardware equipment on field) from different manufacturers as well as coordination with multiple agencies for contract execution. The Agency on a minimum, shall have executed & completed at least five individual contracts of cyber security solution for control center's for a city wide projects, within India or outside India, during the last five years period. Verification end user performance certificates shall be submitted for the same. The agency shall furnish a brief write-up, backed with adequate data, explaining its available capacity and experience (both technical and commercial) for the execution of the proposed scope of work within the specified time of completion after the meeting all their current commitments. The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Ten Million INR. Agency shall also submit bank solvency Certificate of not less than Ten Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
57	3.11 Fibre Optic Communication System (FOC)-Data Communication Network provider	93	The agency on a minimum shall be operating under an accredited ISO 9001:2015 systems. The agency should have minimum 10 years of experience in India in the field of providing Fibre optic communication system field of water management which shall include supply, installation, commissioning and operation and maintenance of the same, as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing the control and automation system from different manufacturers as well as coordination with multiple agencies for contract execution. The Agency on a minimum, shall have executed & completed at least ten individual contracts in the areas of water management, within India or outside India, during the last ten years period. The agency should have own splicing and testing equipment and details of the same to be submitted. Verification end user performance certificates shall be submitted for the same. Note: In the event, if the OEM intends to execute (design, supply, program, execute and commission) the works, the OEM shall comply in full to the qualification criteria as required in this clause & specification. The agency shall furnish a brief write-up, backed with adequate data, explaining its available capacity and experience (both technical and commercial) for the execution of the proposed scope of work within the specified time of completion after the meeting all their current commitments. The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Five Million INR. Agency shall also submit bank solvency Certificate of not less than Five Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
58	3.12 LED Video wall Display System for both Water & Sewerage SCADA	94	The agency on a minimum shall be operating under an accredited ISO 9001:2015 systems. The agency should have minimum Five years of experience in India in the field of providing Videowall for large control center's which shall include supply, installation, commissioning and operation and maintenance of the same, as required under this contract, within India or outside India and shall demonstrate capability and resources for integrating/interfacing the videowall system with the control and automation system from different manufacturers as well as coordination with multiple agencies for contract execution. The agency shall be an authorized channel partner for the Videowall system proposed for minimum three years from the date of bid. Verification certificates signed not less than the country head of OEM shall be submitted. The Agency on a minimum, shall have executed & completed at least ten individual contracts, within India or outside India, during the last Five years period. Verification end user performance certificates shall be submitted for the same. Note: In the event, if the OEM intends to execute (design, supply, program, execute and commission) the works, the OEM shall comply in full to the qualification criteria as required in this clause & specification. The agency shall demonstrate that it has service facility with trained service engineers (minimum 15 numbers who are trained from the OEM) available and are full time employees of the agency. The agency shall furnish a brief write-up, backed with adequate data, explaining its available capacity and experience (both technical and commercial) for the execution of the proposed scope of work within the specified time of completion after the meeting all their current commitments. The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Twenty Million INR. Agency shall also submit bank solvency Certificate of not less than Twenty Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award, shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works
59	I Civil Design & Drawings	104	g) Valve chamber construction and Pre-cast slab and associated civil works in the GLR area and distribution network	Please provide the drawings for the same as per the line sizes for a comprehensive deliverable assessment and costing purpose	Refer addendum-1
60	I Civil Design & Drawings	105	i) Fencing, Foundation & chamber drawings for installation of realtime water quality equipment in the distribution network	Please provide the drawings for the same as per the line sizes for a comprehensive deliverable assessment and costing purpose	The bidder is required to provide the same based on the line sizes.



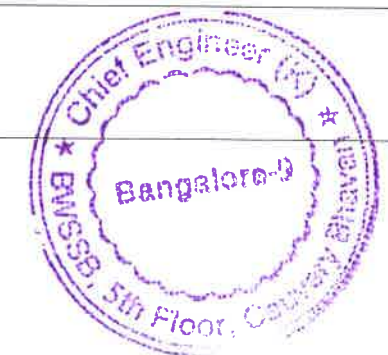
61	(c) Interoperability Test & Integration co-ordination	120	The test shall be carried out in presence & co-ordination with the local system (Plant contractor/ system integrator)	Please confirm that the existing vendors at all sites shall provide their assistance on a No Cost basis to the Successful Bidder for this purpose	Confirmed The successful bidder shall co-ordinate with BWSSB O&M engineers for the same
62	9.6 Instrumentation Design Criteria	122	All Sensors should be of self-cleaning type	Please note this is not possible or applicable for all sensors to be used in the project Kindly consider deletion / suitable editing	As per bid conditions
63			Each flow meter shall be provided with downstream and upstream isolation valve including the washout facility	Please consider revising as it may not be practically possible to comply at site	As per bid conditions
64	9.8 Flow Measurement and Control	122	Each flow meter shall be installed in the pipeline within a suitable access chamber. The access chamber shall be designed to provide adequate space for personnel access to the chamber and around the flow meter for maintenance. The flow meter system shall provide flow rate and totalized flow indication	Please provide size wise drawings for the same for a comprehensive deliverable assessment and costing purpose	Refer addendum-1
65	2) Full bore electromagnetic flow meter Ground Level Reservoir	124	Flow Tube Liner - Polyurethane	Polyurethane liners are generally utilized with highly corrosive chemicals Please allow Buna Nitrile / Hard Rubber as an option	As per bid conditions
66	3) Full bore electromagnetic flow meter with battery powered and	125	Flow Tube Liner - Polyurethane	Polyurethane liners are generally utilized with highly corrosive chemicals Please allow Buna Nitrile / Hard Rubber as an option	As per bid conditions
67	4) Ultrasonic Insertion Type flow meter -Water Distribution Network	126	Number of sensor 1 set or 2 sets as per site requirement	Please decide the minimum requirement as the sets of sensors to be used will have a price implication for all bidders	Shall be read as two track
68	9.9 Level Measurement and Control	128	Ultrasonic Level Transmitter	Please provide detailed specification for Ultrasonic level Transmitter like, a. Range b. Display etc	The ultrasonic level transmitters envisaged in this project is for measuring level in the ground level reservoirs and ESR (if applicable) The bidder shall consider minimum 0-10 mtrs as range of the instrument but not limited to If the range as per site requirements increases, the bidder shall provide the same
69	Sewerage SCADA LED Video wall:	144	The video wall shall be subject to inspection and testing (Factory acceptance test) at the manufacturer's manufacturing facility by the employer and the employer's representative before dispatch. The testing before dispatch shall include complete functional check of the system	Please a. Exempt FAT for this item as most video walls are manufactured out of India b. Elaborate on the "complete functional check of the system" expected to be demonstrated	As per bid conditions The functional check of the system shall involve functionality of associate hardware, software, video splitting, etc
70	9.18 Uninterruptible Power Supply (UPS)	148 and other locations	9.18 Uninterruptible Power Supply (UPS) for Instrumentation, Control & Automation	Please allow use of DC UPS in lieu / addition to AC UPS to improve overall system efficiency of Power Backup Systems	Confirmed
71	1 Electrical & Earthing Requirements for SCADA control Room	148 and other locations	Copper earth pit station as per IS - 3043 using 600 X 600 X 3 mm copper earth plate complete with accessories and hinged cover shall be provided by the Contractor. Another	Please allow chemical earthing at all locations	In addition to copper earth pit station as per IS-3043 and copper plate, Treatment of soil for improvement of conductivity shall be allowed As per soil condition, chemical earthing may be used provided the earthing resistance value is maintained within the specified standard limits
72	2. Preliminary Inspection and Testing at the Place of Manufacture Field Instruments and Analytical Instruments	158	After the successful completion of the manufacturer's own inspection and testing of instruments to be supplied under the Contract, complete functional tests inclusive of calibration checks shall be carried out in the presence of the Engineer, engineer's representative and the Contractor at the manufacturer's factory where the instruments have been manufactured. Such tests shall include a demonstration that an increase or decrease of the measured value at several points over the full range of the instrument produces a corresponding increase or decrease in the instrument output signal. These tests shall include checks on the specified accuracy of the instrument at all points: Complete functional testing of all instruments (Field instrumentation inclusive of all Analytical instrumentation, lab equipment & LIMS system, Online Real Time Multi Parameters Continuous Monitoring System for Influent and Effluent, etc.) Tests: IEC, HPLC, BOD, COD, TOC, TSS, TDS, pH, ORP, UV, etc. All tests shall be carried out at the manufacturer's factory.	1. Please restrict the inspection for major items only and specify them 2. Please provide the sampling rate for the inspection for the above 3. Please provide the no of officers / consultants / others that shall be attending the inspection 4. Please confirm who will bear the travel, lodging and boarding charges of attendees for inspection from Client / Consultant side?	1 As per bid conditions. 2 100% of quantity of equipment shall be made available for inspection 3 Refer Volum-2, Part-13-Inspection, Testing & commissioning requirements, Clause 13.1.1, Sub clause i-1, Page 13-5 4 Refer Volum-2, Part-13-Inspection, Testing & commissioning requirements, Clause 13.1.1, Sub clause i-1, Page 13-5 5 The cost of the entire travel, boarding and lodging at all attendees shall be borne by the bidder
73	4 Functional Testing at the OEM factory where the equipment has been	159	Once the preliminary inspection and testing is complete to the satisfaction of the Engineer, functional testing shall commence in the presence of the employer and employer's representative for 100% quantity of all equipment.	Please consider a lower sample rate as else this may result in huge durations of time when only functional testing is carried out at manufacturer's works affecting the project completion period adversely	As per bid conditions
74	B Inspection and Testing Requirements for Control & Automation works a)	160	The entire cost of the complete FAT and any other required testing (interoperability, site visits etc), including reasonable per diem expenses to cover meals, lodging, transport and similar expenses for all BWSSB & employer's representative personnel attending the tests, shall be the responsibility of the Contractor/ system supplier and shall be included in the contract price	Please provide the no of officers / consultants / others that shall be attending the inspection / FAT	Refer Volum-2, Part-13-Inspection, Testing & commissioning requirements, Clause 13.1.1, Sub clause i-1, Page 13-5
75	e) Site Acceptance Tests (SAT)	163	shall be tested for availability for a continuous period of ninety days	Please confirm that this will be done on a pro rata basis and the payments will be released on pro rata basis accordingly	PI refer Part A Contract Data Clause No 1.1.78. Water and Sewerage can be considered as a section However further sections within water and sewerage cannot be considered.
76	e) Site Acceptance Tests (SAT)	163	If the system fails to meet the above criteria, the SAT period shall be reinitiated further for a period of thirty days, till such time the complete system exhibit full error-free functionality for 100 % of the total duration of the test.	Please confirm that this will be done on a pro rata basis and the payments will be released on pro rata basis accordingly	PI refer Part A Contract Data Clause No 1.1.78. Water and Sewerage can be considered as a section However further sections within water and sewerage cannot be considered.
77	9.21 Training Requirements A. Before Conduction of Site Acceptance Test (SAT)	164	The entire cost of the complete training programme, including reasonable per diem expenses to cover meals, lodging, transport and similar expenses for all BWSSB personnel attending the training program, shall be the responsibility of the Contractor/ system supplier and shall be included in the contract price	Please provide the no of officers / consultants / others that shall be attending the training	The bidder shall consider on a minimum 50 personnel (combined)
78	B. After Conduction of Site Acceptance Test (SAT)	164	Note-1 In addition to the above, the contractor shall conduct training to AEE, EE and ACE cadre of BWSSB to familiarize them to the functionality of the centralized SCADA systems and all its ancillary system	Please provide the no of officers / consultants / others that shall be attending the training	The bidder shall consider on a minimum 50 personnel This is in addition to the personnel already specified 50 personnel
79	11.15 Qualification Criteria for Electrical agency/vendor for Design, Supply, Program, Execution and Commissioning of Electrical Works	211	The agency which shall design, supply, program, execute and commission electrical equipment system (HT & LT) on a minimum, shall be operating under an accredited ISO 9001:2015 system and shall be a Class-A electrical contractor with state PWD or central PWD, with a minimum of 10 years' experience of having designed, executed & completed complete electrical systems, inclusive of supply, installation and commissioning, on a single facility within India during the last five years and shall demonstrate capability and resources for integrating/interfacing with control systems from different manufacturers as well as coordination with multiple agencies for contract execution		Query not clear. As per bid conditions



80		10.4 Fiber Optic Cable network	168	The Redundant FOC network along with all required hardware accessories shall be provided at the following locations	Please provide the approximate distances and the routing Please confirm that all permissions needed for the FOC work shall be procured and provided by the BWSSB Please also confirm that any delays in the permissions for the above shall not be to the account of the Successful Bidder	The distance to be considered on a minimum between the stations are as below: T K Halli to Harohalli= 55 KM (Approximate) Harohalli to Tataguni= 25 KM (Approximate) Tataguni to Vajrahalli= 10 KM(Approximate) In addition to the above,the bidder shall also consider the FOC cable length from the main cable route to the individual plants control room where the FOC panel is to be installed and to be integrated local control system for data communication T K Halli Location-10 Km KM, Harohalli Location-16.5 KM, Tataguni Location-8.5 KM, Therefore the total length of FOC to be considered on a minimum is 125 x2=250 KM The bidder shall note that the FOC work area is under BWSSB and is along the pipeline route and the successful bidder shall co-ordinate with BWSSB for all permissions for carrying out the work.
81		10.4 Fiber Optic Cable network	168	Note: The contractor shall note that the FOC ducts required for laying the FOC cabling are being installed under various pipeline contract	Please provide the details for the same. Please also confirm that any delays in the completion of the above shall not be to the account of the Successful Bidder.	1 The FOC cable ducts are being installed under various pipeline contracts namely CP07,CP08 2 No delay damages will be levied on the Contractor under such circumstances. However in similar lines no claims will be accepted from the Contractor other than Time Extension
82		PART-12 Document & Material Management System Requirements 12.1 Introduction	236	The scope of work under this contract shall include the project documentation and equipment information for all contracts being executed under BWSSB Stage V project i.e CP-02,CP-03,CP04,CP-07,CP-08,CP-09,CP-10,CP-12,CP-13,CP-24,CP-25,CP-26,CP-27 and other existing plants of BWSSB.	Please provide details regarding the scope, status and work completion details for a comprehensive assessment to enable bidders to submit their proposal	The scope of work/description for each package mentioned is already mentioned in the bid document Kindly refer to Volume-2,Part-1, Clause 1.12
83		13.1 Inspection and Testing During Manufacture 13.1.1 General	256	(iv) If any materials or any part of the works fails to pass any inspection / test, the Contractor shall rectify or replace such materials or part of the works and shall repeat the inspection and/or test upon giving a notice as per (i) above. Any fault or shortcoming found during any inspection or test shall be rectified to the satisfaction of the Engineer before proceeding with further inspection of that item. Any circuit previously tested, which may have been affected by the rectification work, shall be re-tested.	Please confirm that the retesting etc. is applicable only for the material which has not passed in the earlier round	If the material which has failed is part of system,then the entire system shall be tested once again. If the equipment is a standalone system,then only the standalone system shall be tested.The bidder shall note that the same shall be at the sole discretion of the Engineer.
84		15.3 COMPREHENSIVE OPERATION & MAINTENANCE SCOPE OF WORK	298	1) Man Power for running the control center inclusive of security staff, all required manpower (Centralized SCADA manager, SCADA programmers, SCADA operators for both Water SCADA & Sewerage SCADA, support staff, field engineers, technicians, etc as required on a minimum) for carrying out comprehensive & predictive O&M, all required manpower for carrying out repair works/replacement works	Please provide the minimum manpower to be provided by the Successful Bidder so that all received Bids are at par	The bidder shall refer Volume-2,Part-15,clause 15.19 for the minimum number of manpower to be provided. Any additional manpower required by the bidder to complete the work and operate the entire system,shall be considered by the bidder and shall be deemed to be included in the bidder quoted price
85		15.26 PENALTIES FOR FAILURE TO ACHIEVE THE FUNCTIONAL	321	Fiber optic cable (FOC) redundant communication- Failure/ downtime of more than 8 hours per day 10,000 INR per day	Please exclude reasons beyond reasonable control of the Successful Bidder such as excavation or damage by Third Parties etc. for this clause	As per bid conditions The bidder is required to enter in to AMC agreement with the agency/service provider as per the bid conditions to provide services as required under this bid
86		15.26 PENALTIES FOR FAILURE TO ACHIEVE THE FUNCTIONAL GUARANTEES- 2.5	322	Leased line communication & data availability- Failure/ downtime of more than 4 hours per day 5,000 INR per day	Please exclude reasons beyond reasonable control of the Successful Bidder such as excavation or damage by Third Parties etc. for this clause	As per bid conditions The bidder is required to enter in to AMC agreement with the agency/service provider as per the bid conditions to provide services as required under this bid
87		15.26 PENALTIES FOR FAILURE TO ACHIEVE THE FUNCTIONAL GUARANTEES- 2.6	322	Redundant wireless communication equipment & data communication-Failure/ downtime of more than 8 hours per day 5,000 INR per day	Please exclude reasons beyond reasonable control of the Successful Bidder such as poor services / failure of services for any reason from the Service Provider etc. for this clause	As per bid conditions The bidder is required to enter in to AMC agreement with the agency/service provider as per the bid conditions to provide services as required under this bid
88		15.26 PENALTIES FOR FAILURE TO ACHIEVE THE FUNCTIONAL GUARANTEES- 2.8	322	Broadband High speed Internet connectivity availability- Failure/ downtime of more than 4 hours per day 10,000 INR per day	Please exclude reasons beyond reasonable control of the Successful Bidder such as poor services / failure of services for any reason from the Service Provider etc. for this clause	As per bid conditions The bidder is required to enter in to AMC agreement with the agency/service provider as per the bid conditions to provide services as required under this bid
89		15.26 PENALTIES FOR FAILURE TO ACHIEVE THE FUNCTIONAL GUARANTEES- 6.1,7,1,8.1	324,325	wireless communication equipment & data communication-Failure/ downtime of more than 6 hours per day 3 10,000 INR per day	Please exclude reasons beyond reasonable control of the Successful Bidder such as poor services / failure of services for any reason from the Service Provider etc. for this clause	As per bid conditions The bidder is required to enter in to AMC agreement with the agency/service provider as per the bid conditions to provide services as required under this bid
90		3.2 Management Information System (MIS)	87	The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of not less than Ten Million INR. Agency shall also submit bank solvency Certificate of not less than Ten Million INR issued by Nationalized bank.	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agencyfor review and approval of BWSSB before design and execution of works.
91		3.3 Instrumentation (Level, Flowmeters -GLR)-System Integrator	87-88	The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Thirty Million INR. Agency shall also submit bank solvency Certificate of not less than Thirty Million INR issued by Nationalized bank. The agency shall have an average annual turnover of minimum fifteen Million INR over the last three years	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agencyfor review and approval of BWSSB before design and execution of works
92		3.4 Instrumentation (Flowmeters & pressure - Distribution Network, Sewage Network)- System Integrator	88	The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Thirty Million INR. Agency shall also submit bank solvency Certificate of not less than Thirty Million INR issued by Nationalized bank	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted	As per bid conditions The successful bidder upon contract award,shall submit the same as part of credential submission of respective agencyfor review and approval of BWSSB before design and execution of works



93		3.5 On-line Real Time Water Quality Multi Parameters Instrument In Water Distribution Network - SCADA Integrator	89	The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Thirty Million INR. Agency shall also submit bank solvency Certificate of not less than Thirty Million INR issued by Nationalized bank.	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted.	As per bid conditions. The successful bidder upon contract award shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
94		3.6 On-line Real Time Influent & Effluent Sewage Quality Multi Parameters Instrument- System Integrator	90	The agency shall provide letter from a reputed bank stating the availability of liquid assets and credit facilities of the not less than Thirty Million INR. Agency shall also submit bank solvency Certificate of not less than Thirty Million INR issued by Nationalized bank.	In our humble opinion as the EPC/ Bidder is taking full responsibility of the contract execution, this may be kindly deleted.	As per bid conditions. The successful bidder upon contract award shall submit the same as part of credential submission of respective agency for review and approval of BWSSB before design and execution of works.
95	Volume -1	Section III. Evaluation and Qualification Criteria- Clause 2.4 Experience _ Sub Clause no 2.4.2 (a)	32 of 134	The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of electronically integration of SCADA system for at least one comprehensive (Comprehensive = Aggregate of Two or three plants in the same project) Water supply project with a capacity of more than 350 MLD. Comprehensive Water supply project shall include WTP, Pumping station, and ESR/GLR and water distribution network. All the above Works should have been completed and commissioned during last Ten (10) years as on date of submission of Bid.	Design, procurement, design, procurement, supply, installation, testing and commissioning of electronically integration of SCADA system to EPC of 15 MGD desalination plant / 3 TMC Lift irrigation pumping station / WTP project experience should be considered. Request you to also consider the global references.	Desalination plant can be considered. However It should be a comprehensive water supply project including pumping station, ESR/GLR and water distribution system. Lift Irrigation project is not relevant and will not be considered. This is an ICB bidding hence global experience will be considered. However it may be noted that in case of global reference the qualifying company should be part of the JV.
96	Volume -1	Section III. Evaluation and Qualification Criteria- Clause 2.4 Experience _ Sub Clause no 2.4.2 (b)	32 of 134	The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of SCADA system for at least one sewerage Treatment plant with a capacity of minimum 100 MLD. All the above Works should have been completed and commissioned during last Ten (10) years as on date of submission of Bid.	Kindly consider the experience of design, procurement, supply, installation, testing and commissioning of SCADA system to EPC for 5 STP projects adding upto cumulative of 100 MLD capacity. Request you to also consider the global references.	As per Bid conditions. Since this is an ICB, Global references will be considered. However the company with Global references should be part of the JV.
97	Volume -1	Section III. Evaluation and Qualification Criteria- Clause 2.4 Experience _ Sub Clause no 2.4.2 (c)	33 of 134	The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of similar capacities (water/sewerage) as specified in criteria 2.4.2(a) or (b) with State Govt /Board/Corporation, for a city with a population similar/equal or greater to Bangalore city population. And integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects during the last Five (5) years. The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment(as required), Supply of all required consumables, inclusive of complete operating cost of the Centralized SCADA system) Operation & Maintenance for the above Centralized SCADA, for a minimum period of continuous Three years, inclusive of DLP period, during the last Five (5) years. All the above Works should have been completed during last Five (5) years as on date of submission of Bid.	Request you to kindly modify the requirement as below - "The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of similar capacities (water/sewerage) as specified in criteria 2.4.2(a) or (b) with State Govt /Board/Corporation, for a city with a population similar/equal or greater to Bangalore city population. And integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects during the last Five (5) years. The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment(as required), Supply of all required consumables, inclusive of complete operating cost of the Centralized SCADA system) Operation & Maintenance for the above Centralized SCADA, for a minimum period of continuous Three years, inclusive of DLP period, during the last Five (5) years. All the above Works should have been completed during last Five (5) years as on date of submission of Bid."	As per Bid conditions.
98	Volume -1	1.1 Technical Evaluation	22 of 134	In addition to the criteria listed in ITB 35.1 (a) – (b) the following factors shall apply	We could not find ITB 35.1 (a) in the bid data sheet, request you to please share.	The ITB downloadable link is provided in Section 1 of the bid document as it is part of JICA's SBD.
99	Volume -1	Section VII - General Conditions (GC) - Clause no 3	95 of 134	The GCC shall be the Conditions of Contract for Design, Build and Operate Projects (First Edition 2008), (FIDIC Gold Book) prepared by the Fédération Internationale des Ingénieurs-Conseils or FIDIC (FIDIC Gold Book) available at http://fidic.org/bookshop . The GCC is deemed to include the General Conditions of Dispute Adjudication Agreement and the Procedural Rules for Dispute Adjudication Board Members.	Please share the GCC, Conditions of Contract for Design, Build and Operate Projects (First Edition 2008), (FIDIC Gold Book) prepared by the Fédération Internationale des Ingénieurs-Conseils or FIDIC (FIDIC Gold Book) as we are not able to download the same from given portal. Fees required for purchasing the tender has been already paid by us.	The same is downloadable. However in case bidder wants they can come and collect the soft copy.
100	Volume -1	Section VIII - Particular Conditions of Contract - Clause -1.1.24	99 of 134	Cost plus Profit -Cost + 5% (including profit, overhead and statutory deductions etc)	Competative price will be quoted by contractor. However the restrictions of Cost +5% (including profit, overhead and statutory deductions etc) to be removed.	As per Bid conditions.
101	Volume -1	Section VIII - Particular Conditions of Contract - Clause -1.1.78	99 of 134	Time for Completion of Design- Build- 30 months from the commencement date (applicable for both Water and Sewerage)	Commencement date to be calculated from release of advance payment to the contractor.	The Commencement date will be from the date of issue of the Letter of Commencement.
102	Volume -1	Section VIII - Particular Conditions of Contract - Clause -4.2	100 of 134	Performance Security (as percentages of Accepted Contract Amount in currencies) -	Only one performance security to be issued by contractor for 10% of the contract value which will be valid from the date of purchase order till the completion of contractual warranty period.	As per Bid conditions.
103	Volume -1	Section VIII - Particular Conditions of Contract - Clause -4.2	100 of 134	Reductions in Performance Security from the end of Retention Period:	Performance security to be returned to the contractor after completion of warranty period.	As per Bid conditions.
104	Volume -1	Section VIII - Particular Conditions of Contract - Clause -9.6	101 of 134	Delay damages	0.1 % of the Accepted Contract Amount for the Design-Build Period per week delay.	As per Bid conditions.
105	Volume -1	Section VIII - Particular Conditions of Contract - Clause -9.6	101 of 134	Delay damages	10% of the undelivered portion of Accepted Contract Amount for the Design-Build Period.	As per Bid conditions.
106	Volume -1	Section VIII - Particular Conditions of Contract - Clause -14.2	102 of 134	Amount of Advance Payment (percent of Accepted Contract Amount)	Total 10% of the Accepted Contract Amount for Design-Build component excluding Provisional Sums. Number of instalments One (1)	As per Bid conditions.
107	Volume -1	Section VIII - Particular Conditions of Contract - Clause -17.8	103 of 134	Total liability of the Contractor shall not exceed -110% of the Accepted Contract Amount	The overall and aggregate liability of the Contractor / Siemens under this Contract / PO shall not exceed and limited to 100% of the contract value. Neither party shall be liable and responsible for any loss of profit, loss of revenue, loss of production, interruption of operations or loss of use, cost of capital, loss of interest, loss of information and/or data, claims arising from Customer's contracts with third parties or for any indirect or consequential damages and losses.	As per Bid conditions.



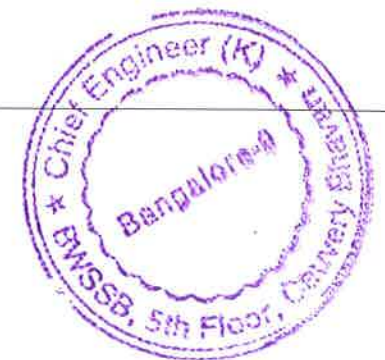
108	Volume -1	Additional Clause		Cancellation/ Suspension/Termination	Termination cannot be unilateral. If termination is done by the Purchaser for convenience then it has to be on a/c of a material breach by the contractor and after a lapse of reasonable cure period to remedy that defect. In the event Purchaser wishes to have a right to terminate for convenience or the Contract is terminated as per above, then Contractor shall be entitled to get paid for the entire original scope of Works less any costs and expenses not incurred, and any damages incurred due to the termination. Siemens shall have the right to suspend / terminate in case of following i) Purchaser fails to make payment of any amount within 30 days after it has become due and payable, or (ii) Purchaser fails to perform its obligations necessary for Contractor to deliver or complete the Works e.g. Non settlement of pending claims / non issue of change orders etc, or (iii) delivery of the Works is prevented by export restrictions for more than 3 months; or (iv) Purchaser is insolvent or any proceeding is instituted against Purchaser.	As per bid conditions. Please refer the GCC Clauses.
109	Volume -1	Additional Clause		Deemed Acceptance	The system shall be deemed to be accepted after successful completion of commissioning or putting of the equipment's into commercial use whichever is earlier or the customer's delays acceptance for reasons not attributable to Siemens more than 15 days after the commissioning.	As per Bid conditions.
110	Volume -1	Additional Clause		Force Majeure	Except as otherwise herein provided, neither Party shall be liable or deemed in default for failure to perform any duty or obligation that such Party may have under this Agreement where such failure has been occasioned by any act of God, fire, strike, war, or any other cause outside the reasonable control of that Party, and occurring without its fault or negligence. The Party whose performance has so been interrupted shall give the other Party notice of the interruption within thirty (30) working days or as soon as possible, depending of the cause of the Force Majeure, and cause thereof, and shall use every reasonable means to resume full performance of this Agreement as soon as possible. If after thirty (30) working days the non-performance has not been cured the Supplier shall assist in finding an alternative source of supplies if Supplier is the Party so affected by the Force Majeure incident.	As per Bid conditions.
111	Volume -1	Additional Clause		Alteration/Change order	If the Customer desires any variations in any part of the Works, notice in writing shall be given to the Contractor by the company, before taking over so as to enable the Contractor to make necessary arrangements and/or procedures, and to enable the company and the Contractor to reach the mutual written consent, and in case the supplies have been shipped, the equipment is already manufactured or in the course of manufacture, or any matter done or drawings or patterns made that require to be altered, a reasonable sum to be mutually agreed on in respect thereof shall be paid by the company. If the time period from signature of contract until acceptance/completion is longer than one year, the customer shall be responsible for any change in costs, delays, or modified performance resulting from changes to laws, codes, standards, court rulings, or decisions made by public authorities, if these changes occur after the date of signing of the contract.	As per bid conditions.
112	Volume -1	Additional Clause		Bidding with Closed consortium	Is bidding with closed consortium is permissible wherein both the parties of the consortium will be liable to the customer for their respective portion & scope.	All members of the JV will be jointly and severally liable for the project.
113	Volume -1	Additional Clause		Bidding with open consortium	Is bidding with open consortium is permissible wherein both the consortium parties are jointly & severally liable to the customer.	As per bid conditions.
114	Volume -1	Additional Clause		Price variation	Is IEEMA price variation clause is applicable for this tender.	As per Bid conditions.
115	Volume -2	1.4 Description and Scope of Work	6 of 373	General	We understand that Details of Existing installed system and systems being installed under various contracts at various locations to be made available to bidder. Kindly confirm.	The existing control system at both water and sewerage plants are majorly based on M/s Schneider Electric-Quantum series, M/s Mitsubishi Electric systems-Q series and Allen Bradley systems. The Bidder is encouraged to visit the project sites and gather information as required for his bid proposal. The bidder's bid proposal shall be deemed to have included all information required and all costs associated.
116	Volume -2	1.4 Description and Scope of Work-Point no -4	6 of 373	Existing BWSSB GIS system	We would like to request you to please share Details of Existing GIS system and platform used by BWSSB.	The GIS system currently used at BWSSB is ARC GIS Ver 10.8 in co-ordination with Karnataka Remote Service Center.
117	Volume -2	1.4 Description and Scope of Work	6 of 373	Migration from the existing centralized SCADA server system to the new centralized SCADA server system.	We understand that existing electrical equipments i.e. HT/LT panels, Transformer, DG, UPS are capable to cater the new demand load along with existing load and we can utilize the same in the proposed package as per their availabilities and life expectancy. Please clarify. In the view of above, you are requested to share following details - a) Load details of existing and additional requirement b) Existing system Voltage Level / Fault Level / Equipment status report etc c) Maintenance work required for the electrical system d) Single Line Diagram of the proposed system along with cabling details. e) Running hrs of DG Set f) Please clarify the scope (Employer's or Contractor) of Electrical System i.e. HT/LT/Transformer/DG set / Lighting / Earthing as this is not a part of BOQ. g) existing centralized SCADA like architecture, type of existing system, no. of system, No. of remote sites, Communication protocols etc.	The bidder is requested to refer to Part 11 - section- 11.2 Scope of works and the drawings of the existing system architecture, which depicts the control system architecture with all details. The bidder shall note that due to the new equipments and increase in building service loads under this contract, the existing electrical equipment will have to be upgraded and replaced with new equipments. The bidder shall include upgradation and replacement where ever necessary without compromising the quality and functionality (uninterrupted) even during a prolonged power outage. The Bidder is expected to make a site visit and gather information as required for his bid proposal. The bidder's bid proposal shall be complete with all information required and all costs including any upgradation suggested from utility supply provider (ref part 11 spec). a) Load details of existing and additional requirement. Reply: The current SLD of the existing system is included in the bid. b) Existing system Voltage Level / Fault Level / Equipment status report etc. Reply: Refer part 6 and part 11 specs and existing system SLD. c) Maintenance work required for the electrical system. Reply: Shall be ascertained from Specs and survey of site. d) Single Line Diagram of the proposed system along with cabling details. Reply: To be designed by bidder and submitted. e) Running hrs of DG Set. Reply: Generator shall run continuously during power outage without interruption (Ref Spec). f) Please clarify the scope (Employer's or Contractor) of Electrical System i.e. HT/LT/Transformer/ DG set / Lighting / Earthing as this is not a part of BOQ. Reply: Supply installation testing and commissioning of all the above mentioned items are in the contractor's scope (Ref spec).
118	Volume -2	1.4 Description and Scope of Work	6 of 373	Water SCADA: The water SCADA system shall integrate all existing water treatment facilities at T K Halli (all stages) & T G Halli locations (currently plant is under construction and data shall be integrated on completion). Water pumping stations at T K Halli, Harohalli and Tataguni locations (all stages), inclusive of the surge vessel locations, all Ground level reservoirs (GLR's) of BWSSB. The above facilities shall be integrated with the centralized SCADA server.	You are requested to share all the relevant data of the existing system i.e. operational status, design data, O&M data, list of the equipments etc.	The bidder shall note that the existing control system at both water and sewerage plants are majorly based on M/s Schneider Electric, M/s Mitsubishi Electric systems, Siemens and Rockwell SCADA systems and are currently in working condition. The local SCADA systems are designed for complete auto operation of the respective facilities with manual/semi auto mode and auto mode of operation.



119	Volume -2	1.4 Description and Scope of Work	6 of 373	Existing SCADA System	Please share Details of Existing SCADA systems installed	The bidder shall note that the existing control system at both water and sewerage plants are majorly based on M/s Schneider Electric- M/s Mitsubishi Electric systems- Siemens and Rockwell SCADA systems
120	Volume -2	1.4 Description and Scope of Work	6 of 373	GLR System	Please share details of GLR PLC Hardware for existing locations where data to be integrated in CSC	All the GLR shall be provided with new Instrumentation and Control and automation system as required under the specifications
121	Volume -2	1.4 Description and Scope of Work	7&8 of 373	T K Halli Location , Harohalli Location ,Tataguni Location & Page -8 ,T K Halli Control system , Harohalli Control system ,Tataguni Control system	We assume, these are the only WTP and WPS (TK Halli, Harohalli, Tataguni) to be considered for integration with central scada center. Please clarify, if there are any other locations, from where data is to be taken?	The bidder shall consider all WTP's,WPS's,surge vessel locations,JK Doddi location,T K Halli,Tataguni and Harohalli locations.vajrahalli location all field instrumentation with all required hardware,cabling etc to achieve complete integration of all data
122	Volume -2	1.4 Description and Scope of Work	7&8 of 373	T K Halli Location , Harohalli Location ,Tataguni Location & Page -8 ,T K Halli Control system , Harohalli Control system ,Tataguni Control system	Please confirm, if the GPRS communications are existing in the list of WTPs and WPS given here	The bidder shall note that plants (WPS) executed under BWSSB Stage IV Phase II are equipped with GPRS communication system
123	Volume -2	1.4 Description and Scope of Work	7&8 of 373	T K Halli Location , Harohalli Location ,Tataguni Location & Page -8 ,T K Halli Control system , Harohalli Control system ,Tataguni Control system	Please confirm if these WTP and WPS are currently sending data to the central scada center of Yokogawa	The bidder shall note that plants executed under BWSSB Stage IV Phase II are communicating with the current center
124	Volume -2	1.4 Description and Scope of Work	7&8 of 373	T K Halli Location , Harohalli Location ,Tataguni Location & Page -8 ,T K Halli Control system , Harohalli Control system ,Tataguni Control system	Please confirm, what communication protocol (DNP3 etc) are supported by the PLC/SCADA at these WTP and WPS	The bidder shall note that the existing control system at both water and sewerage plants are majorly based on M/s Schneider Electric systems
125	Volume -2	1.4 Description and Scope of Work-Points no 16	11 of 373	Integration with existing servers (UFW SCADA server, Bulk flowmeter server, etc. The contractor shall integrate all the data from the existing servers at the existing control center	Please share details of Existing server for UFW SCADA Server and Bulk Flowmeter. Ports being used by these servers.	The available details are attached with this reply
126	Volume -2	1.4 Description and Scope of Work	11 of 373	Sewerage SCADA -The contractor scope of work shall include migration & integration of all existing STP which are integrated with the existing sewerage SCADA server	You are requested to share all the relevant data from all the other existing Water treatment plants (300 MLD) WTP, Stage IV Phase-I & Stage IV Phase-2	The bidder shall note that the existing control system at WTP are based on M/s Schneider Electric Quantum systems Stage IV Phase -I system is equipped with Allen Bradley (Rockwell)system
127	Volume -2	1.4 Description and Scope of Work-Point no -37	14 of 373	Design, supply installation, testing and commissioning of redundant Fibre optic Communication network from T K Halli to Vajrahalli Junction.	Distance between T K Halli to Vajrahalli Junction for calculation of FO Cable length	The distance to be considered on a minimum between the stations are as below: T K Halli to Harohalli= 55 KM (Approximate) Harohalli to Tataguni= 25 KM (Approximate) Tataguni to Vajrahalli= 10 KM(Approximate) In addition to the above,the bidder shall also consider the FOC cable length from the main cable route to the individual plants control room where the FOC panel is to be installed and to be integrated local control system for data communication. (T K Halli Location-10 KM) Harohalli Location-16.5 KM, Tataguni Location-8.5\ KM) Therefore the total length of FOC to be considered on a minimum is 125 x2 = 250 KM The bidder shall note that the FOC work area is under BWSSB and is along the pipeline route and the successful bidder shall co-ordinate with BWSSB for all permissions for carrying out the work.
128	Volume -2	1.4 Description and Scope of Work-Point no -47	16 of 373	Integration of the stations/plants other than those mentioned in this document to Water and Sewage SCADA servers which will be available for integration during the seven (7) years of comprehensive operation and maintenance period	Is integration of future location are limited to Packages mentioned in RFQ or it will be applicable to any new package for Which RFQ will be floated by BWSSB During operation & Maintenance period.	As per bid conditions,Any new package(flow & Pressure monitoring stations,WTP,WPS,GLR,Water quality monitoring stations,STP,ISPS and any other facility which requires monitoring which will be floated/made available by BWSSB during the operation and maintenance period
129	Volume -2	1.4 Description and Scope of Work-Points no 49	17 of 373	Replacement of Hardware	Replacement of Hardware at completion of 5th year, only those hardwares which are being phased out to be replaced or all hardwares to be replaced. Communication platform also to be changed? Like wise 4G to latest technology at that time.	All hardware as specified in the bid documents As per bid conditions
130	Volume -2	1.6 Points no -2	19 of 373	IP-68 rated enclosure shall be provided to house the water quality Multi parameters instrument, UPS, RTU (Remote terminal unit)	IP 68 Rated enclosures to mount all equipment such as Analyzer and instruments transmitter are practically not possible to manufacture. Relaxation should be given by BWSSB with respect to IP ratings of these enclosure	Bidder shall consider IP-65 rated enclosures
131	Volume -2	Clause 1.8	20 of 373	On-line Real Time Influent & Effluent Sewage Quality Multi Parameters Measurement at Sewage Treatment Plants	OCEMS system - Sensor to be connected with existing plant PLC or its data to be transmitted directly from sensor to CSC, if it needs to be done directly then RTU hardware are required at these location and the same needs to be incorporated in BOQ	The data is required to be transmitted directly to the CSC All associated hardware,software required for data transmission from these locations shall be considered and shall be deemed to be included in the price proposal of the bidder
132	Volume -2	Contract No	22,23 & 24 of 373	Details of other contracts taking place on the same Site or adjoining the Site	Please confirm, if the list of ongoing WTP, WPS and STP given here are also included in the List of WTP and WPS given in page no 7 and 8 of 373 and list of STPs given in page 39 and 40 of 373	the bidder shall note that the page number 7,8 include details on the current and ongoing works(water) and page number 39,43 include details on already existing STP's page 22,23,24 include details on curret ongoing works on stage V project
133	Volume -2	Annexure 3 List of STP	39 & 40 of 373	List Of Sewage Treatment Plants To Be Integrated With Centralized Scada Center Under Cp-24 Contract	We assume, these are the only STPs to be considered for integration with central scada center. Please clarify, if there are any other locations, from where data is to be taken?	STP's along with their ISPS are required to be integrated with the CSC sewerage SCADA server
134	Volume -2	Annexure 3 List of STP	39 & 40 of 373	List Of Sewage Treatment Plants To Be Integrated With Centralized Scada Center Under Cp-24 Contract	Please confirm, if the GPRS communications are existing in the list of STPs given here	Among the list,STP's executed under stage IV Phase-II are equipped with GPRS mode of communication
135	Volume -2	Annexure 3 List of STP	39 & 40 of 373	List Of Sewage Treatment Plants To Be Integrated With Centralized Scada Center Under Cp-24 Contract	Please confirm if these STPs are currently sending data to the central scada center of Yokogawa	Confirmed These STP's (executed under stage IV Phase-II) are sending data to the current CSC
136	Volume -2	Annexure 3 List of STP	39 & 40 of 373	List Of Sewage Treatment Plants To Be Integrated With Centralized Scada Center Under Cp-24 Contract	Please confirm, what communication protocol (DNP3 etc) are supported by the PLC/SCADA at these STPs	The bidder shall note that the existing control system at both water and sewerage plants are majorly based on M/s Schneider Electric systems,M/s Siemens and M/s Mitsubishi Electric.
137	Volume -2	Annexure 3 List of STP	39 & 40 of 373	List Of Sewage Treatment Plants To Be Integrated With Centralized Scada Center Under Cp-24 Contract	In the price schedule, 15 sets of influent and effluent analysers each are mentioned. However, as per this list, the number of STPs are 36. Please confirm the quantity given in Price schedule clause 3.1.13	BWSSB shall select the STP's that shall be equipped with the equipment from the list of the STP's provided. The quantity shall be as per the price schedule
138	Volume -2	2.24 Delivery, Loading, Unloading and Storing at Site	68 of 373	Handling of heavy materials	Please confirm that Hoist & Storage area is already available and same shall be provided by BWSSB/Employer to successful bidder free of cost	Bidder shall arrange for the same and shall be deemed to be included under the bidder's price proposal
139	Volume -2	2.25 Spare Parts	69 of 373	Spare Parts required after the taking over the Plant shall be furnished in Schedule-7A & 7B Recommended Spares, Tools and Testing Equipment, Volume III of the Bid document by the Bidder.	Schedule-7A & 7B are missing in Volume III kindly provide the schedule- 7A & 7B	The same shall be read as " Schedule 6A & 6B"
140	Volume -2	Point no 10	124 of 373	Flow Transmitter Unit -Power Supply-0-250 VAC, 45-65Hz – Optional - 11 to 40 V DC	Please add 24 VDC	Noted and confirmed
141	Volume -2	Point no 17	125 of 373	Electromagnetic Flow Meter- Flow Tube Liner- Polyurethane	Please add Hard Rubber for this application	As per bid conditions



142	Volume -2	Point no 12	126 of 373	Electromagnetic Flow Meter- Communication- With Integrated GPRS Modem for wireless Communication	Please also consider Flowmeter with External Modem	As per bid conditions
143	Volume -2	Point no 4	126 of 373	Ultrasonic Insertion Type flow meter -Water Distribution Network - Number of sensor - 1 set or 2 sets as per site requirement	Please define till what size 1 set is to be considered and till what size 2 set is to be considered	shall be read as 2 track
144	Volume -2		126 of 373	MOC -of Ultrasonic Flow meter	Please share MOC of pipe where this flowmeter is to be installed	The MOC of the pipeline is MS
145	Volume -2		126 of 373	Installation -of Ultrasonic Flow meter	Kindly advise if any shutdown will be provided for installation of this flowmeter?	The successful bidder shall co-ordinate with BWSSB operation and maintenance team for respective division/sub division and plan for the shutdown well in advance to minimize the flow disruption in the network and to give the utility sufficient time for alternative measures.
146	Volume -2	Clause 9.12	137 of 373	Closed Circuit Television (CCTV) System	Please confirm if the CCTV system is to be implemented only for the central scada center or for any other locations also	CCTV shall be implemented only at Centralized SCADA center and at shimsha bhavan building housing the center
147	Volume -2	9.14 Closed Circuit Television (CCTV) System	131 of 373	Online Real time Influent and Effluent Continuous Multi Parameter Monitoring Instrument to be installed at Sewage Treatment Plants	Please confirm if Multiparameter Transmitter can be used which can accommodate all sensors	As per bid conditions
148	Volume -2	9.15 Approved Vendor/Manufacturer/Make List-Instrumentation	141 of 373	Approved Make List	Kindly include Siemens make for Flow Indicator / flow meter (Ultrasonic & Electromagnetic) & Network Switches	Please refer other reply in this regard
149	Volume -2	Part 11/PARTICULAR ELECTRICAL PLANT REQUIREMENTS /11.2 Scope of works	198 of 373	Particular Electrical Plant Requirements	The scope also talks about HT Board, Transformer, LT Board, APFC, Battery, Lighting system etc Please confirm if these are part of scope and in the price schedule, where the price needs to be considered for these items	part of scope if the utility supplier instructs for any modification As per bid conditions
150	Volume -2	PART-12 / Document & Material Management System Requirements	236 of 373	Particular Electrical Plant Requirements	Please confirm if RFID tagging of assets is in scope or work?	Shall be read as Barcode
151	Volume -2	PART-12 / Document & Material Management System Requirements	236 of 373	Particular Electrical Plant Requirements	If RFID tagging is in scope then please confirm, the type, quantity and location of assets which are to be tagged	The bidder shall consider minimum 5 number of bar code reader equipments. The quantity shall be for all equipments, pipes and valves, instruments, electrical equipment, etc in the WTP's, WPS's, STP's and ISPS and CSC
152	Volume -3	Schedule 2-C1 2.1.1	6 of 28	Taking handing over of existing system from existing contractor after completion of current operation & maintenance period and Migration of existing data (Yokogawa system) to new centralized SCADA system proposed under this contract	We understand that the after handing over taken from M/S Yokogawa if any fault occurs in the existing Yokogawa system, same shall be taken care by the BWSSB as we have no expertise in the Yokogawa System Kindly Confirm	Confirmed The bidder shall take handover of the existing system and operate and maintain the system
153	Volume -3	Schedule 2-C1 2.1.2	6 of 28	Dismantling & shifting of currently installed components (UPS, DG, computers, server, etc as identified by engineer) to BWSSB identified storage location/Stores within Bangalore city.	You are requested to share the complete list of the complete equipment for dismantling and shifting works with following information - Capacity / Quantity / GA Drawing & other relevant information i.e Stores/ Storage location /Distance between sites from centralized SCADA system etc	Dismantling & shifting of currently installed components (UPS, DG, computers, server, system consoles, glass panels, etc.) The store location shall be within Bangalore city limits
154	Volume -3	Schedule 2-C1 2.1.3 12 & Vol-2-Annexure -3 & STPs details mentioned in CP -25 26,27	7 of 28	Sewage Treatment Plants (STP) Integration with centralized SCADA center - Supply, Installation, Testing and Commission of On-line Real Time Influent & effluent Sewage Quality Multi Parameters Instrument for parameters like COD, BOD, pH, TSS, TOC, etc (as a single multiparameter unit) with all required accessories, and as required under the specification -15 Nos	We understand that 15 Nos of online monitoring systems are required at each influent and effluent side as per the BOQ, list mentioned in the document Vol-4 page no 10 of 23. No online monitoring systems are required for STP's mentioned in the annexure 3 or any other locations. Please confirm.	The STP mentioned in annexure is the complete list of STP currently BWSSB shall identify 15 nos of STP's from the above list, where the equipment need to be installed during DDE with discussion with operation and maintenance division of BWSSB
155	Volume -3	Schedule 2-C1 2.1.7.7 & 2.1.7.7	7 of 28	Required Civil works, Control center ancillaries - UPS System - 2x 80 KVA, Parallel Redundant, Three phase, 415V, 50Hz, Standalone, Online, microprocessor based UPS System with SMF batteries for 60 minutes backup with accessories DG Set -200 KVA, Three Phase, 415 V, 50 Hz, 0.8 PF Generator Set with AMF Panel, Electronic governor & acoustic enclosure	We understand that UPS & DG sets are already installed at the site and only minor civil works are required for the 2 No of UPS & 1 No of DG Set	The bidder understanding is correct Existing UPS and DG set shall be replaced as mentioned in scope of work the civil works shall be considered for the replacement equipment as required to suit and approval of the engineer
156	Volume -3	2.1.7 Required Civil works, Control center ancillaries 2.1.7.4	7 of 28	Centralized Airconditioning system for the entire control center along with all required accessories, hardware, related work etc Precision air conditioning system for the server room area	Kindly support with dimension/size of server room area for calculation of Centralized air conditioning system	Bidder shall refer the bid drawings which indicate the current size of the control room Refer bid drawing-ONTB-BWSSP(3)-CP24-CSC-004. Additionally bidder shall visit the site to gather relevant information as required Please note that site visit was conducted by BWSSB on 14th November.
157	Volume -3	2.1.4 Common Ancillaries to be provided at Centralized SCADA Center	7 of 28	REDUNDANT GPRS Wireless communication Module to receive and transmit data from various remote locations at the CSC Water SCADA server	Kindly support with exact no. of remote site	The remote sites to be considered are given in the specifications Refer Volume-2, Part-1-project Requirements, Clause 1.4-Description and scope of work
158	Volume -3	2.1.5-Other Software to be provided under this contract	7 of 28	Document & Material Management software with required computers, hardware, scanners, all other accessories system to cover all BWSSB facilities (Water & Sewerage) covering all WTP's, WPS, GLR, STP, ISPS, etc for all stages Information on individual facilities with RFID tagging shall be implemented Typical data shall include the following on a minimum 1) Name of the equipment 2) Equipment Installed date 3) Equipment datasheet 4) Equipment installation location with RFID location tag 5) Equipment Spare Information 6) Equipment maintenance information & next due date of maintenance 7) Equipment approved drawings, as-built drawings, all documentation related to the equipment 8) All other requirements as per specification	We understand that all these details are already available for existing system for all stages Please confirm	All available data shall be shared with the successful bidder on contract award The bidder shall co-ordinate with BWSSB O&M team during implementation/execution period to obtain any other information required.



159	Volume -3	2.1.8 -Communication network from T K Halli to Vajrahalli Junction,GPRS communication to Shimsha Bhavan as backup mode of communication 2.1.8.1	8 of 28	FOC Integration panel inclusive of required hardware accessories ,communication equipment for redundant FOC cable from T H Halli area,Harohalli ,Tataguni locations up to Vajrahalli junction	Kindly provide the distance between T H Halli, Harohalli, tataguni location to Vajrahalli Junction for FOC Cable	The distance to be considered on a minimum between the stations are as below T K Halli to Harohalli= 55 KM (Approximate) Harohalli to Tataguni= 25 KM (Approximate) Tataguni to Vajrahalli= 10 KM(Approximate) In addition to the above,the bidder shall also consider the FOC cable length from the main cable route to the individual plants control room where the FOC panel is to be installed and to be integrated local control system for data communication (T K Halli Location-10 KM, Harohalli Location-16.5 KM, Tataguni Location-8.5 KM) Therefore the total length of FOC to be considered on a minimum is 125 x2 = 250 KM The bidder shall note that the FOC work area is under BWSSB and is along the pipeline route and the successful bidder shall co-ordinate with BWSSB for all permissions for carrying out the work
160	Volume -3	2.1.8.1	8 of 28	Note: The conduit ducts required for laying the FOC cable shall be laid under separate contracts	We understand that laying as well as supply of conduit ducts are part of separate contracts & not part of this contract. Please confirm	The bidder shall consider the conduit ducts and laying of the same and all required hardware from the main cable duct running along the pipeline route to the individual stations which shall be integrated to achieve complete integration
161	Volume -3			General	As this is a DBO tender so we understand that rating and Sizes of various equipments mentioned in the BOQ are tentative and it may change as per the design or actual requirement at site. Please clarify.	The contractor need to ensure that the rating and sizing mentioned in the BOQ/Technical Spec is the minimum which the bidder to provide
162	Volume -4	Water SCADA DATA transmission diagram	5 of 23	Current-Water SCADA DATA transmission diagram	DATA transmission diagram available in Volume-4 is not in readable format kindly support with clear diagram	A clear A-4 size drawing of the same is available and is attached for the bidder reference
163	Volume -4	Current-Sewerage SCADA DATA transmission diagram	6 of 23	Current-Sewerage SCADA DATA transmission diagram	DATA transmission diagram available in Volume-4 is not in readable format kindly support with clear diagram	A clear A-4 size drawing of the same is available and is attached for the bidder reference
164	Volume -4	Current Master SCADA central layout	6 of 23	Current Master SCADA central layout	Master SCADA central layout (few portion) available in Volume-4 is not in readable format kindly support with clear layout	A clear A-4 size drawing of the same is available and is attached for the bidder reference
165	Page No. 32 of Vol 1-2.4.2 (a)			The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of electronically integration of SCADA system for at least one comprehensive Comprehensive = Aggregate of Two or three plants in the same project) Water supply project with a capacity of more than 350 MLD. Comprehensive Water supply project shall include WTP, Pumping station, and ESR/GLR and water distribution network. All the above Works should have been completed and commissioned during last Ten (10) years as on date of submission of Bid	The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of electronically integration of SCADA system for at least one comprehensive Comprehensive = Aggregate of Two or three plants in the same project) Water supply project with a capacity of more than 350 MLD. Comprehensive Water supply project shall include WTP, Pumping station, and ESR/GLR and water distribution network. All the above Works should have been completed and commissioned during last Fifteen (15) years as on date of submission of Bid	As per Bid conditions
166	Page No. 33 of Vol 1-2.4.2 (b)			The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of SCADA system for at least one sewerage Treatment plant with a capacity of minimum 100 MLD. All the above Works should have been completed and commissioned during last Ten (10) years as on date of Submission of Bid	We request to consider bidders experience for design, procurement, supply, installation, testing and commissioning of any water supply/sewerage SCADA system. Instrumentations, PLC systems and SCADA are commonly used for both Water supply and sewerage systems. The bidders experience can be evaluated from the same. And consider the similar works completed and commissioned during last Fifteen (15) years as on date of Submission of Bid.	As per Bid conditions
167	Page No. 34 of Vol 1-2.4.2 (c)			The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of similar capacities (water/sewerage) as specified in criteria 2.4.2(a) or (b) with State Govt /Board/Corporation, for a city with a population similar/equal or greater to Bangalore city population. And integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects during the last Five (5) years. The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment(as required), Supply of all required consumables, inclusive of complete operating cost of the Centralized SCADA system) Operation & Maintenance for the above Centralized SCADA, for a minimum period of continuous Three years, inclusive of DLP period, during the last Five (5) years. All the above Works should have been completed during last Five (5) years as on date of submission of Bid	The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of similar capacities (water/sewerage) as specified in criteria 2.4.2(a) or (b) with State Govt /Board/Corporation. And integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects during the last Fifteen (15) years. The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment(as required), Supply of all required consumables, inclusive of complete operating cost of the Centralized SCADA system) Operation & Maintenance for the above Centralized SCADA, for a minimum period of continuous Three years, inclusive of DLP period, during the last Fifteen Years. All the above Works should have been completed during last Fifteen years as on date of submission of Bid	As per bid conditions
168	Page No. 36 of Vol 1-2.4.2 (d)			The bidder shall have NABL certified testing & calibration laboratory /Testing & calibration laboratory as per ISO/IEC 17025 for Flowmeter cum transmitter, Pressure Transmitter, and shall demonstrate experience in the role of Prime Contractor (Single entity or JV member for installation & commissioning of minimum 25 Electromagnetic Flowmeters (Instrumentation) in the distribution network in a single project	We request you kindly evaluate the bidder on their similar work experience. This clause will discourage EPC contractors from participating the tender. Kindly delete the clause	As per bid conditions
169	Page No. 37 of Vol 1-Notes for the applicant			The Bidder shall be essentially an original Equipment Manufacturer (OEM) for SCADA software & Automation (PLC) hardware or shall be an Authorized System Integrator/authorized specialist sub-contractor for the OEM for a minimum continuous period for minimum last 10 years period. Only one system integrator/authorized specialist sub-contractor per OEM shall be allowed for bidding. If more than one specialist sub-contractor/system integrator for the same OEM shall bid, such bids shall be rejected	We request you kindly evaluate the bidder on their similar work experience. This clause will discourage EPC contractors from participating the tender. Kindly delete the clause.	As per bid conditions
170		The Location of New scada system centres to be located in the drawing		To be finalised by the client and also the recommended size of the SCADA room to be built	Is it possible to get it	The SCADA control center is at Shimsha Bhavan,Jayanagar. The layout of the center is provided in Volume-4



171		The requirement of load for the New 83 SCADA outlet centres to be specified		By EPC contractor has to give the civil design based on civil design we will work out the power requirement with based on the no of working stations, AC, CCTV and other facilities required	Only existing central SCADA layout is given We request you to get the area required for 83 outlets So that we can arrive other power requirements etc .	There is space available at the GLR locations for the installation of panels The bidder is encouraged to visit the sites and obtain information as required
172		Lighting system		Power requirement for Each building We are considering all LED fittings with 2x2 30W and downlighters for passage area and pantries	Recommended Lighting lugs level required for various rooms like SCADA Monitoring centre, office room, conference room etc . No of outdoor lighting locations may be specified around the building	Ref Part 6 clause 6.16 and part 11 clause 11.14
173		Air conditioning		AC requirement based on size of the control room and we are considering Split AC system	We have to consider Normal Airconditioner or Precision AC has to be confirmed by the client and also the temperature required may be confirmed	Not acceptable Shall be provided as per bid conditions
174		CC TV		Are you particular about camera specification	application -Doom and Bullet camera for outside	shall be provided as per bid conditions
175		Fire Detector System		We will follow the fire department norms for the fire detector system arrangement This is decided based on the LAYOUT and also normal fire extinguishers will be provided	We will go for normal Fire detectors and fire alarm panels in case any specific requiremen may be confirmed by the client	Not acceptable Shall be provided as per bid conditions only Any deviations from the bid conditions shall lead to technical disqualification Complete details as per bid requirements shall be submitted
176		POWER REQUIREMENT FOR EACH LOCATION		Detailed drawing not available, but the centralised control room available	Do you recommend us to follow the same for all the location to be confirmed by the client	As per bid conditions
177		UPS SYSTEM		Based on the power requirement we will decide the UPS capacity The networking points will be provided with both UPS and Raw power for all the workstations, Tables and conference hall	We recommend for 60% of the normal power requirement for the SCADA, lighting etc . The UPS will have about 40 to 60 minutes backup excd AC load Any specific requirement may be furnished	Not acceptable Complete SCADA equipments(all hardware and telecommunication equipmen,lighting loads shall be through UPS supplyAs per bid conditions only
178		EPABX SYSTEM		No of inputs lines and No of extension to be decided	Please recommend	The bidder shall consider two inoput lines and the no of extensions as minimum 15 numbers
179		DG SET		Based on the power requirement we will decide the DG capacity	The DG set will be considered for 100% backup during the power failure with auto changeover arrangement Any specific requirement by the client may be Specified	The DG set capacity mentioned in the bid shall be provided on a minimum
180		SOLAR POWER		We are considering 50% of the power requirement on solar with PV Module as per standards	Any recommendation may be specified by the client	As per bid conditions
181		EARTHING ARRANGEMENT		We preferred to go for copper bonded 18mm Dia Rods with chemicals for the earthing system with earthing chamber and clamping arrangements	what is the earthing value recommended by the client or SCADA team may be specified	less than one ohm
182		CONTROL AND POWER CABLES		All the control and power cables will be as per IS1554 with Alu and Cu conductor	The rating of the cables will be decided based on the current. In case any specific requirement may be recommended.	As per bid conditions
183		OPTIC FIBER CABLES		We will follow SCADA OEM recommendations	All the OFC will be laid in the GI / HDPE pipe The client has to confirm the cables has to be laid on open trench or HDD method to be clarified	Not acceptable As per bid conditions Bidder to refer the specifications for details requested.
184		LISONING		The following lisoning works are considered 1. City coporation for Road cutting and laying 2. Traffic police for Road cutting and laying 3. Electrical department -BESCOM 4. CEIG	Any other departments left out may be specified	BBMP, Any other department as may be required during the execution shall be considered by the bidder,including local area committees,resident welfare committees (as applicable),etc
185		SCADA SYSTEM		Our Technical team is studying in your requirement and Tender documents since the time is running out for the submission of prebid queries, we will come to your office and discuss about our clarifications with your department team.		
186	Vol-1- Eligibility and Qualificanon Criteria		32-33	The Bidder shall have experience in the role of primecontractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of electronically integration of SCADA system for at least one comprehensive (Comprehensive = Aggregate of Two or three plants in the same project) Water supply project with a capacity of more than 350 MLD Comprehensive Water supply project shall include WTP, Pumping station, and ESR/GLR and water distribution network All the above Works should have been completed and commissioned during last Ten (10) years as on date of submission of Bid	We request that the same be considered as <u>Alternate 01</u> The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of electronically integration of SCADA system for at least one comprehensive Two or three plants in the same project) Water supply / Sewerage project with a capacity of more than 350 MLD Comprehensive Water supply / Sewerage project shall include WTP, Pumping station, and ESR/GLR and water distribution network / Sewerage Treatment Plant , Sewerage Pumping Stations All the above Works should have been completed and commissioned during last Twelve (12) years as on date of submission of Bid <u>Alternate 02</u> "The bidder must have carried out (completed / substantially completed / work done Certificate in ongoing work) SCADA works for Water / Sewerage as below 1 Work of INR 60 Crores or equivalent USD OR 2 Works totaling to INR 80 Crores or equivalent USD OR 3 Works totaling to INR 100 Crores or equivalent USD In the past 3 years in Government Sector in India as a direct contract from the Government The same shall be certified by an officer not below the rank of The Executive Engineer of the government / semi government / board /corporation of a city" The above condition will provide a more relevant yardstick for evaluating Bidder experience and also encourage healthy competition	As per bid conditions
187	Vol-1- Eligibility and Qualification Criteria		34	The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of SCADA system for at least one sewerage Treatment plant with a capacity of minimum 100 MLD All the above Works should have been completed and commissioned during last Ten (10) years as on date of Submission of Bid	As the above condition (2.4.2 (a) covers Sewerage and Water Supply this may be kindly deleted	As per Bid conditions



188	Vol-I- Eligibility and Qualification Criteria		34-36	The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of similar capacities (water/sewerage) as specified in criteria 2.4.2(a) or (b) with State Govt /Board/Corporation, for a city with a population similar/equal or greater to Bangalore city population. And integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects during the last Five (5) years. The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment(as required), Supply of all required consumables, inclusive of complete operating	Please consider and incorporate the following condition in lieu of the existing condition "The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of with State Govt /Board/Corporation, for a city and integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects. The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment (as required), Supply of all required consumables, inclusive of complete operating cost of the Centralized SCADA system) Operation & Maintenance for the above Centralized SCADA, for a minimum period of continuous Five years, inclusive of DLP period, during the last ten (10) years"	As per bid conditions.
189	Vol-I- Eligibility and Qualification Criteria		36-37	The bidder shall have NABL certified testing & calibration laboratory /Testing & calibration laboratory as per ISO/IEC 17025 for Flowmeter cum transmitter, Pressure Transmitter, and shall demonstrate experience in the role of Prime Contractor (Single entity or JV member for installation & commissioning of minimum 25 Electromagnetic Flowmeters (Instrumentation) in the distribution network in a single project	Please delete the clause The facilities available with the OEMs only This will limit the competition	As per Bid conditions
190	Vol-I- Eligibility and Qualification Criteria		37	The Bidder shall be essentially an original Equipment Manufacturer (OEM) for SCADA software & Automation (PLC) hardware or shall be an Authorized System Integrator/authorized specialist sub-contractor for the OEM for a minimum continuous period for minimum last 10 years period	Please delete the clause This will limit the competition	As per Bid conditions
191	Vol-I- Eligibility and Qualification Criteria		37	Note: Only one system integrator/authorized specialist sub- contractor per OEM shall be allowed for bidding. If more than one specialist sub-contractor/system integrator for the same OEM shall bid, such bids shall be rejected.	Please delete the clause This will limit the competition	As per Bid conditions
192	Submission of Bid				Please allow bidder to submit bid considering multiple OEMs. It may be noted that restricting submission of bid with single OEM limit the possibility of submitting a cost effective bid.	As per Bid conditions
193	Vol I, Sec-II ITB18.7		2	The accepted contract amount shall be deemed to include all taxes, duties, levies, cess, royalty to Govt, GST and other charges imposed on production	What is GST rate changed/increased after bid? How it will be reimbursed to bidder What is govt imposes a new tax? How will it be reimburse to contractor?	As per bid conditions
194						
195	Vol I, Sec II- Bidding data sheet ITB 21.7		3	In case the JV is not legally incorporated, the Bid security can be submitted by lead member/lead partner on behalf of JV	(a) Whether we can form a JV in form of consortium without creating any Legal entity or Partnership firm or Agency (b) Whether lead member/ all members can raise the invoice/E way bill on behalf of JV. Can money be remitted to lead member Bank A/c? (c) What process to be followed for the purpose of billing e.g. E way bill/ invoice generation in case of unincorporated JV (d) whether the Bank A/c be opened in one of the JV bidder's name as per the JV agreement or can the remittance of money be routed through ESCROW A/c. As per our understanding banks do not permit opening of Bank a/c in favour of unincorporated JV. (e) In case of not incorporated JV, can each partner limit their liability to the extend of their supplies? How invoice will be raised. Who will generate E way bill Through JV or each party will raise separate bill for their portion of work (G) Any other condition applicable for not incorporated JV	As per bid conditions
196	Vol I, Sec VIII 4.2 - Particular Condition of Contract		3	The performance security shall be submitted in two installments. 1st within 28 days from award of contract for 10% of contract value (design- build components excluding provisional Sums 2nd installments -10% of contract value within 28 days from commencement of commissioning period	(a) Do we need to submit 2 BG of 10% of contract value (20% in total) (b) Please clarify what is the provisional sums (c) period of Bank Guarantee? Can that be given for initial period of 5 years & then further extended for remaining period (c) Can the performance security or advance payment security be give by one of the bidder in case the JV is not legally incorporated	As per Bid conditions
197	Vol I, Sec VIII 4.2 - Particular Condition of Contract		3	40% reduction at the end of retention period. 40% after 5 years of continuous and satisfactory performance Balance after contract completion	Why do we keep 2 performance security open in O&M period. If we give 2 performance security of 10% of contract value at the time of commencement of commissioning then 1st performance security should be returned back after retention period	As per Bid conditions
198	Vol I, Sec III of Eligibility & Qualification Criteria 2.2.2. Annuals		9	Minimum average annual turnover of USD 11 Mn calculated as total certified payments received for contracts in progress and/or completed within last 5 years divided by 5 years	Need Clarity on its calculation?	Turnover from relevant contracts will be considered
199	Vol I, Sec III- Eligibility and qualification criteria, 2.3 Financial		9.1	Application capacity=([maximum value of works executed during one financial year in the last 5 years] * [Number of years for completion of the works] * [2.5]-[value of the existing commitments in all ongoing civil works to be completed during the next three years])	(a) Need to understand the formula & requirements (b) do we need to provide details of existing contract commitments?	As per bid conditions.
200	Vol I, Sec III- Eligibility and qualification criteria, 2.3 Financial Structure		10	Application capacity = ([maximum value of works executed during one financial year in the last five years] x [Number of years for completion of the works] x [2.5] - [value of the existing commitments in all ongoing civil works to be completed during the next three years])	Since this is not Civil work, The word Civil should be removed	Agreed. Only relevant contracts will be considered
201	Vol I, Sec III, 2.4.2 (a) Specific		11	If member in JV, specify participation in contract value amount	Can this ratio be changed later on?	As per Bid conditions



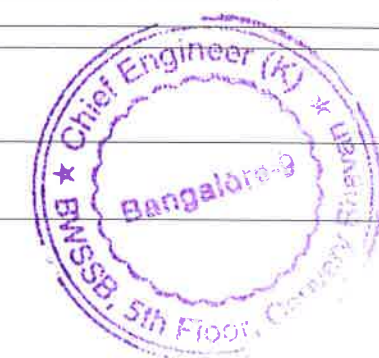
202	Vol I, Sec VIII-14 1 of PCC		16	However in PCC clause 14 1 mentioned "The amount of applicable GST will be paid separately to the contractor with each bill at the time of payment "	Please clarify how will this work ?	As per Bid conditions
203	Vol I, Sec III of Eligibility & Qualification Criteria 2.4 Experience-Eligibility Criteria Note (1) for the applicant		16	Only one system integrator/ authorised specialist sub-contractor per OEM shall be allowed for bidding	Please clarify what is "per OEM" mean	OEM(Original equipment manufacturer of PLC and SCADA equipment)shall be eligible to bid if it meets the bid requirements or Only one system integrator/ authorised specialist sub- contractor of that OEM shall be allowed for bidding if it meets the bid requirements Authorised system integrator/specialist sub contractor means agency only supplies and execute with a particular /same OEM products only and not with any other OEM products
204	Vol I, Sec VIII 14 20 - Particular Condition of		18	JICA Reimbursement procedure is applied to this Contract for Local currency portion of the Contract	What is the JICA reimbursement procedures ? Please specify which documents to refer to ?	As per Bid conditions
205	Vol I, Sec VIII 16 2 - Particular Condition of Contract		19	If the Bank has suspended disbursement under the loan or credit from which payments to the contractor are being made, in whole or in part, for the execution of the Works and no alternative funds are available as provided for in sub clause 2.4 (Employer's Financial Arrangement) the contractor may by notice suspend the work	(a) If Bank suspends the disbursement, what about our balance payment ? (b) What is security of our money in such situation ?	As per Bid conditions
206	Vol I, Sec VIII 17 8 - Particular Condition of		6	Total Liability of the contractor shall not exceed 110% of the Accepted Contract Amount	It should be capped at 100% of Accepted Contract Amount	As per Bid conditions
207				Not Available	Must be there in contract agreement	As per Bid conditions.
208	Vol I, Sec VIII 13 5 - Particular Condition of Contract		15	As an exception the above, the Provisional Sum for the cost of the DB shall be used for payments to the Contractor of the Employer's share (one- half) of the invoices of the DB for its fees and expenses	This clause is unclear, please share with an example when would this be applicable	As per Bid conditions
209	Vol I, Sec VIII 13 8 - Particular Condition of Contract		15	Replace G C sub clause 13 8 with the following text The contract price and rates and prices shall be adjusted for Design Build part of the Contract	This clause is unclear, please share with an example when would this be applicable	As per Bid conditions
210	Vol I, Sec IX- Contract Form		6	Installation, testing, trial run, performance guarantee Test and commissioning of Control & Automation Instrumentation & Electrical Plant, Equipment and Machinery for Incorporation in the Permanent Work (Schedule 2)	Payment % does not total up to 100%. Successful Installation 60%, Completion of testing, trial run- 30% what about remaining 10%	Refer Addendum I
211	Volume 2/Section 1		Part 9-15	Specifications Pressure Range 0 to 10/20/50/ 100 Kg/cm ² g	The Pressure Range specifications defined in Technical specifications are on very higher Side. We request to allow Bidder to chose the suitable Pressure Range as per the Site Condition requirements.	confirmed
212	Volume 2/Section 1		Part 9-8	The Contractor shall use electromagnetic flow meters with data logger, battery backup of 5 years and UPS, solar power backup as specified, for all closed pipe liquid flow measurements	As per requirements bidder has to supply electromagnetic Flow meters with data logger and battery backup of 5 years. As flow meters are battery backup based there is no need of additional UPS. Kindly amend the statement	As per bid conditions
213	Volume 2/Section 1 2.31		Part 2-28	The Contractor shall purchase and maintain two new Scorpio (High End) latest vehicle at Centralized SCADA center to be kept available at all times for the sole use of the Engineer and his staff during the execution stage up to the end of defect liability period. The vehicles shall be registered in the name of BWSSB. The Contractor shall be solely responsible for the upkeep of the vehicle including taxes, insurance, licenses, fuel, oils, lubricants, repairs, and maintenance and shall also provide a competent driver along with the vehicle and driver shall be familiar with Kannada and English Languages. At the end of defect liability period, the Contractor shall handover the vehicle's in good condition to Employer. The overall cost for the same should be deemed to be included in the quoted contract price.	It is required to Provide to Provide 2 Scorpio Till End of DLP. Though it is a sizable cost, there is no billing item for this cost. How to bill this item	The bidder is required to consider the cost of the same in his bid proposal. The overall cost for the same should be deemed to be included in the quoted contract price.
214	Volume 2/Section 1 2.31		Part 2-28	The contractor shall appoint a coordinator(counterpart staff) as identified by BWSSB, who shall co- ordinate with BWSSB on a daily basis. The coordinator shall be based out of Cauvery Bhavan & Shimsha Bhavan. The contractor shall employ the personnel for daily co- ordination with BWSSB throughout the execution (from the start of design & execution period and operation and maintenance period of seven years). The salary for the coordinator to be borne by the contractor and should be deemed to be included in the quoted contract price.	We could find the billing item for this during O&M period, but how to bill for duration of 30 months of execution and DLP period	The bidder is required to consider the cost of the same in his bid proposal. The overall cost for the same should be deemed to be included in the quoted contract price.
215	SBS - 7.1		Part 7-41	The contractor shall note that before the submission and approval of the SCADA software for both water & Sewerage SCADA, the contractor shall arrange for the factory inspection of the OEM facility for the engineer and the engineer's Representative (3 No's) where the SCADA software is manufactured and the core design center of the software, where the core development, R&D of the software, new versions and features are tested before release for production itself takes place	Being the software product, can we consider this activity by means of virtual meeting instead of visit to actual place, prior to approval	Not acceptable. As per bid conditions
216	Invitation for Bids Page No 1 and Section IV Bidding Forms BF-5			IFB number mentioned in IFB is IFB No: BWSSB/CEKTE/TA-11/100/2021/2050/2022-23, However IFB number mentioned in Letter of Technical bid is IFB No.: BWSSP/JICA/Package CP-24. Please confirm which one to be considered as IFB number		The IFB No is BWSSB/CEKTE/TA-11/100/2021/2050/2022-23
217	Section 1 / ITB-1 Page 1			We understand that, ITB to be downloaded from the link provided and same need to be referred for this project. Please Confirm		The same is included in Section 1, ITB -1



218	Section-II BDS -3 ITB 22 2			We understand that legally valid means Power of Attorney submitted on Company Letter Head along with Board resolution shall be accepted OR We understand that legally valid means Power of Attorney shall be on Non Judicial Stamp Paper of Value Rs 200 Please Confirm		POA should be in stamp paper
219	Section-II BDS -4 & 5 ITB 37 1			In volume 4, Price Schedule we have not observed any allocation as provisional sum. Hence, we understand that there is no provisional sum applicable for this project. Please Confirm		Provisional sum is there for this project and it is included in the price schedule.
220	Section-III EQC-3 Clause 1 2 5			We understand that Power shall be provided by BWSSB during O&M period & hence, (electricity) cost is not in bidder scope Please Confirm Please elaborate on calculation of NPV		It is confirmed that the power cost will be borne by BWSSB. However for bid evaluation will be for the total life cycle cost (excluding power cost). The NPV of the O&M cost will be derived as per the provisions of EQC 1 2 4 and will be used for determination of the final evaluated cost.
221	Section VIII PC-3 Clause 4 2			1. We understand that Successful bidder need to furnish Performance security in Two Installments on accepted contract value excluding GST. Please Confirm 2. The first instalment shall be furnished within 28 days of the receipt of notification of award, in the amount (s) of Ten (10) percent of the Accepted Contract Amount for the Design-Build component excluding the Provisional Sums. This Security shall be returned after successful commissioning of work. Please confirm. 3. Please confirm the mechanism of returning of the second installment PBG that shall be furnished within 28 days from the commencement of commissioning period.		As per Bid document
222	Section VIII PC-4 Clause 13 5			1. We understand that provisional sum is 5% of Contract Value. Please Confirm 2. Kindly confirm the purpose for which provisional sum is envisaged.		As per Bid document
223	Section VIII PC-5 Clause 14 2			We understand that both the installments of advance can be claimed immediately after the signing of the agreement after submission of respective Advance Bank Guarantee (security). Please confirm.		As per bid document
224	Section VIII PC-6 Clause 19 2 (a) (i) Clause 19 2 (a) 4			Please Clarify the requirement		As per bid document.
225	General			We understand that GST applicable for this project is 18%. Please confirm.		As per prevalent GST rates.
226	General			Please confirm on is there any Cess applicable for this project, If applicable please confirm applicable Cess percentage on either design & build value or Operation service value or Total Contract Value.		The bidder to be aware of all the applicables taxes and to include the same accordingly in their quoted price.
227			page no 124	We request you to provide flow rate & pressure to offer flowmeter. We understand that provided sizes are line sizes only & flowmeter sizes can be finalized after receipt of flowrate details from BWSSB. Please confirm.		The bidder shall consider the flowmeter sizes as the minimum to be considered and to be provided.
228			page no 124	Please include Hard Rubber Liner also as the same is suitable for drinking water application.		As per bid conditions
229			page no 124	We understand that 4-20mA output would be sufficient for this application only. Please accept.		Confirmed
230			Page No 125	We request you to provide flow rate & pressure to offer flowmeter. We understand that provided sizes are line sizes only & flowmeter sizes can be finalized after receipt of flowrate details from BWSSB. Please confirm.		The bidder shall consider the flowmeter sizes as the minimum to be considered and to be provided.
231			Page No 125	Please include Hard Rubber Liner also as the same is suitable for drinking water application.		As per bid conditions
232			Page No 126	We offer 4-20mA HART output with external GPRS Modem. Please accept.		Confirmed
233			Page No 126	We understand that 4-20mA output would be sufficient for this application only. Please accept.		Confirmed
234			Page No 129	Metallic Diaphragm is also widely acceptable for this application. Please accept.		As per bid conditions
235			Page No 132	9.12 A COD (Chemical Oxygen Demand) Measuring Principle UV-VIS Spectroscopy with entire spectrum scanning between 180 nm to 800 nm	We request you to accept measurement of full wave lengths spectra (UV-VIS Spectrometry) from 200 - 720 nm, as per the CPCB Guideline.	As per bid conditions, Spectrum scanning wavelength should be 180 nm to 750 nm
236			Page No 132	9.12 A COD (Chemical Oxygen Demand) Accuracy +/-2%	We request to accept Accuracy +/-5% as per industry standard	As per bid conditions, For more accurate measurement, Accuracy should be +/-2% with standard solutions
237			Page No 132	9.12 A COD (Chemical Oxygen Demand) Measuring Range - 0-1000mg/l (min)	We request you to accept Measuring Range - 0 - 800 mg/l as per industry standard	As per bid conditions Considering application. COD range should be 1000 mg/L
238			Page No 132	9.12 A COD (Chemical Oxygen Demand) Cleaning - Automatic Cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer.	As per bid conditions In-built automatic cleaning is must for maintenance free operation
239			Page No 133	9.12 B BOD Measuring Principle UV-VIS Spectroscopy with entire spectrum scanning between 180nm to 800 nm	We request you to accept measurement of full wave lengths spectra (UV-VIS Spectrometry) from 200 - 720 nm, as per the CPCB Guideline.	As per bid conditions. Spectrum scanning wavelength should be 180 nm to 750 nm
240			Page No 133	9.12 B BOD Accuracy +/-2%	We request to accept Accuracy +/-5% as per industry standard	As per bid conditions For more accurate measurement, Accuracy should be +/-2% with standard solutions
241			Page No 133	9.12 B BOD Measuring Range - 0-1000mg/l (min)	We request you to accept Measuring Range - 0 - 500 mg/l as per industry standard	As per bid conditions Considering application, BOD range should be 1000 mg/L
242			Page No 133	9.12 B BOD Cleaning - Automatic cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer.	As per bid conditions In-built automatic cleaning is must for maintenance free operation
243			Page No 133	9.12 E Total Suspended Solids (TSS) Measuring Principle UV-VIS Spectroscopy with entire spectrum scanning between 180nm to 800 nm	We request you to accept measurement of full wave lengths spectra (UV-VIS Spectrometry) from 200 - 720 nm, as per the CPCB Guideline.	As per bid conditions. Spectrum scanning wavelength should be 180 nm to 750 nm
244			Page No 133	9.12 E Total Suspended Solids (TSS) Measuring Range 0 -2000mg/L	We request to accept Accuracy +/-5% as per industry standard	Considering application, TSS range should be 2000 mg/L. As per bid conditions



245		Page No 133	9.12 E Total Suspended Solids (TSS) Accuracy +/-2%	We request you to accept Measuring Range - 0 - 800 mg/l as per industry standard	For more accurate measurement. Accuracy should be +/-2% with standard solutions. As per bid conditions
246		Page No 133	9.12 E Total Suspended Solids (TSS) Cleaning Automatic cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer	As per bid conditions In-built automatic cleaning is must for maintenance free operation.
247		Page No 136	9.13.2 Residual Chlorine 2.1 Measuring Principle Colorimetric, DPD Method	We request you to accept Membrane covered, Amperometric Potentiostatic 3-electrode system with electronic inside	DPD Colorimetric Method is more preferable against Amperometric technology as measurement is free from sample's pH, temperature, flow, pressure & chlorine level fluctuation. As per bid conditions.
248		Page No 136	9.13.2 Residual Chlorine 2.5 Cleaning In Built Automatic Cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer	As per bid conditions In-built automatic cleaning is must for maintenance free operation
249		Page No 136	9.13.3 Turbidity 3.6 Cleaning In Built Automatic Cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer	As per bid conditions In-built automatic cleaning is must for maintenance free operation
250		Page No 137	9.13.4 Total Dissolved Solids (TDS) 4.9 Cleaning In Built Automatic cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer	As per bid conditions In-built automatic cleaning is must for maintenance free operation
251		Page No 137	9.13.5 Ph 5.12 Cleaning In Built Automatic cleaning	As per manufacturer standard automatic cleaning is not available feature. Request you to accept cleaning as recommended by manufacturer	As per bid conditions In-built automatic cleaning is must for maintenance free operation
252		4 / 6 of 373	Please note that 45 days of time is too short for MIS software supply, installation, testing and implementation. We need at least 90 days time for the above activity considering the vast scope of system for installation & initialization for documentation. However please allow other features progressively implemented		As per bid conditions This involves design and implementation of project management module and online document system, which is required to be fully implemented to enable BWSSB to monitor and execute the project from the start of the contract award period.
253		27 / 13 of 373	We presume that number of Android & IOS users to be considered is around 20Nos, please confirm		There will be no limit on the number of android & IOS users. The application once developed and tested and approved, shall be made available for download for BWSSB engineers. All regular updates and other updates based on the project, BWSSB and ONTB requirements, time to time during the entire project execution period shall be implemented and updated.
254		50 / 17 of 373	Kindly clarify the line item in price schedule under which Developing a web based application is considered		The bidder shall include the cost of the item under Design, supply, Development & Implementation of Android & IOS application for accessing the Water & Sewerage centralized SCADA data.
255		1.6 (2) / 19 of 373	As per specification, clause No. 1.6 at Water Distribution network (qty 100 No's) RTU is mentioned. But as per BOM, clause No. 2.1.11.2, RTU is not there. We understand that Datalogger needs to be considered instead of RTU required for transmission of data to centralized SCADA center at all these locations. Please confirm		confirmed
256		1.7 / 20 of 373	Considering the installation requirement at strategic location, it would be better if the analyzer system is housed in a closed enclosure of 1.5 m X 2 m with a door for entry & with lock & key facility. This will ensure protection from rains, theft or any kind of tampering. The required solar panels can be installed on top of the enclosure & the batteries can be installed within the enclosure. Hence request you to consider the below- 1. IP rating of the datalogger & analyzers enclosure can be IP 20 2. The enclosure can be supplied in lieu of the rigid wrought iron fencing.		As per bid conditions
257		2.19.3 / 65 of 373	Bidder shall co-ordinate with agencies for getting necessary clearance/approval. However, BWSSB shall provide necessary support. Please confirm.		BWSSB shall provide official letter to the agency and all co-ordination with the respective agency shall be under the scope of the bidder.
258		2.31 / 71 of 373	We understand this requirement of 2 numbers of new Scorpio latest vehicle shall be stationed at CSC for 42 months (30 Months of execution + 12 months of DLP). Please confirm. For estimation of fuel cost we have considered Max of 50 Km of running per day & excluding public holidays. Please confirm.		The vehicle shall be solely used by the Engineer/Employer (BWSSB) during the project execution period and during the defect liability period. The execution period shall require frequent visits to all project sites starting from T K Halli and other sites which are located in and around Bangalore city. Hence the bidder shall consider the same in his costing and bid accordingly and include the same in his quoted cost.
259		Note- 2 / 143 of 373	As per vendor standard, however details of country of Origin shall be provided before finalizing the make/model. Kindly accept		As per bid conditions
260		9.16 / 143 of 373	Kindly confirm that the quantities mentioned here are final and it shall be supplied as a part of common auxiliaries to be provided at centralized SCADA centre listed under line item 2.1.4 in BOM		The number indicated in the bid is the minimum number to be provided. The bidder shall submit the design for review and approval and the same shall be as per control center standards and match the aesthetics and interior design of the control center.
261		C, D / 144 of 373	The requirement for Water SCADA LVS is as below mentioned in various documents- 1. In Specification Vol-2 Page no. 144/373 55" with 2 X 5 2. In Price schedule Vol-3 Page No 6/28 55" with 2 X 4 3. In SBS document Page no. 98/489 65" without any matrix configuration. The requirement for Sewerage SCADA LVS is as below mentioned in various documents- 1. In Specification Vol-2 Page no. 144/373 55" with 2 X 3 2. In Price schedule Vol-3 Page No 6/28 55" with 2 X 3 3. In SBS document Page no. 98/489 65" without any matrix configuration. Please confirm the actual requirement of LVS size & configuration		Water SCADA shall be read as "The active LED VIDEO WALL shall have display area of 9000 mm x 3037.5 mm having display resolution of 7200 x 2430 pixels (with 2x5 configuration)" Sewerage SCADA shall be read as "The active LED VIDEO WALL shall have display area of 6000 mm x 2367.5 mm having display resolution of 4800 x 1890 pixels (with 2x3 configuration)"
262		11.2 / 198 of 373	We understand that at Central Control Room (CCR) below mentioned electrical facilities are not in our scope- 1. 11kV Metal enclosed Switchboards, 11kV/0.433kV transformers 2. HT Cables if any. Please confirm. The scope of electrical works at CCR is limited to the SLD provided in volume 4. Please confirm.		Refer to Scope of work mentioned in Part 11 clause 11.2
263		4 of 23	We understand that the work stations /server/ or other IT hardware shall be provided as per the system configuration shown. Please confirm.		Bidder understanding is not correct. The system configuration included in the bid is the current system configuration existing. The bidder is required to submit the system configuration as per the bid requirements.
264		2.1.2.2 / 6 of 28	In technical specification Volume 2 page number 251 of 373 & Volume 3 Price schedule rack mount type servers are specified, however in SBS document page no. 113 of 489 specifies Blade server. We understand that rack servers are suitable for this requirement. Please confirm.		Rack servers with 4 socket shall be considered.
265	Volume 2 Technical Specifications	127	-	Kindly confirm if Ultrasonic Level Transmitters can only be IP 67 as these are Top Mounted and are not submersed in water to be rated as IP 68	Shall be read as IP-67



266	Volume 3: Price Proposal		12		We assume that in G.R at cas there is no Pressure Transmitter Requirement Kindly reconfirm	Confirmed There is no requirement of PIT at GLR location
267	Volume 3: Price Proposal		13		Kindly provide us the specifications of battery powered pressure transmitter/Logger The Specifications provided in the Volume 2: Technical Specifications are for power operated pressure transmitter	Refer Addendum-1
268	Volume 3: Price Proposal		12	IP 65- Weather Proof	IP 68 rating is for full submergence in the water We assume these panel are to be installed roadside and not inside chamber The Water sample can be guided till the panel and can be drained or returned once water quality is analyzed	Bidder to consider IP-65-weather proof.
269	Volume 2: Technical Specifications		135	Dual Channel or Single Channel Analyser	Being an instrument there are possibilities that power/transmitter module may fail This may affect the reading of all parameter Thus we request BWSSB to allow and also offer Single or Dual Channel Analysers to have good uptime of water quality system, we will ensure to install single/Dual channel Analysers in one cabinet itself.	As per bid conditions
270	Volume 3: Price Proposal		10	Dual Channel or Single Channel Analyser	Being an instrument there are possibilities that power/transmitter module may fail This may affect the reading of all parameter Thus we request BWSSB to allow and also offer Single or Dual Channel Analysers to have good uptime of Influent and Effluent water we will ensure to install single/Dual channel Analysers in one cabinet itself.	As per bid conditions
271	Volume 2: Technical Specifications		136	Aluminum	All Transmitter housing for instruments like pressure/Level/ Flow are either in Aluminum or Polycarbonate Thus kindly accept Aluminum/Polycarbonate housing for analyzers	As per bid conditions
272	Volume 2: Technical Specifications		136	RS 485/4-20/ HART	The GPRS Modem accept various inputs line RS 485, RS 232, 4-20mA This please also allow contractor to choose any communication protocol as mentioned in alternatives	As per bid conditions
273	Volume 2: Technical Specifications		136	Memory in GPRS Modem	There is facility in GPRS modem to store data with time/date stamp, Kindly confirm if GRPS modem can also be used as an alternative to store data This GPRS modem is anyway installed within the cabinet.	As per bid conditions
274	Volume 2: Technical Specifications		136	Potentiostatic, Amperometric	Kindly also accept Potentiostatic technology which is reagent free technology Amperometric is also a widely accepted technology for chlorine measurement used in industry	As per bid conditions
275	Volume 2: Technical Specifications		137	TDS Sensor: SS 316/ Titanium	TDS for measurement requires a conducting material, Thus please also accept SS 316/ Titanium Sensor	As per bid conditions
276	Volume 3: Price Proposal		12	Kindly provide us other manufacturer list	Provided names in the approved list do not manufacture insertion ultrasonic flowmeters.	Refer Addendum-1
277	Volume 2: Technical Specifications		122/125	Empty Pipe Detection Though Smart Electronics	Various manufacturer achieve this diagnostic function through inbuilt smart circuitry in the transmitter. Similar Transmitters are already installed in BWSSB for 110 Villages Water Supply and Sewerage Project. Thus Please allow use of Empty pipe Detection by Smart Electronics	confirmed
278	Volume 2: Technical Specifications		122/125	Flanges CS PN 10 per DIN Standard	Kindly accept DN PN 10 standard suitable for rating upto 10 Bar, As supplying mating Flanges is Contractors responsibility	As per bid conditions
279	Volume 2: Technical Specifications		122/125	Flow Tube Liner Hard Rubber/Neoprene/EPDM/Rilsan	Hard Rubber/ EPDM/Rilsan and other specified liners are already being used in BWSSB for various project, Thus same may be accepted	As per bid conditions
280	Volume 2: Technical Specifications		122/125	Calibration 3 Point/ 2 Point	Flowmeters are calibrated for 3 or 2 Points and are linear devices Thus calibration for 3 and 2 point calibration is sufficient	confirmed. Although 5 point is desirable, bidder To consider 3 point calibration



281	Volume 2 Technical Specifications		125	Communication: with External battery powered modem(Flow Logger)	With integrated modem, the battery life is consumed from the battery of the flowmeter for modems operation. Please allow contractor to select the external model with its own dedicated battery life. Such flowmeters and modems are already installed in BWSSB. Also, Not all flowmeter manufacturer can provide internal modems.	Bidder can consider both options(internal and external battery)
282	Volume 2 Technical Specifications		128	Diaphragm Material SS316L	Kindly Also Accept Metallic Diaphragms. Ceramic are used for low pressure service and abrasive service.	As per bid conditions.
283	Volume 3 Price Proposal		9	Flexibility to offer Mains Powered with Solar Backup for Sizes above DN 600	Kindly note below: 1. Emerson, Yokogawa, Hitachi Do not manufacture Battery Powered Flowmeter. 2. Endress Hauser, KROHNE(Forbes Marshall), ABB manufacture Battery powered flowmeter only upto DN 600. 3. Siemens Manufacture only upto DN 1200. 4. Aichi Tokai Denki Upto DN 150. Thus there is no single manufacturer who can supply all sizes and no Manufacturer who can supply meter above DN 1200.	Mains powered with solar backup confirmed for sizes above DN 600
284	Volume 3 Price Proposal		9	Alternative to Battery can be Solar powered system for real Time Monitoring	For Water Distribution networks battery powered instruments are proposed. Kindly note that Battery powered instruments cannot be used for real time monitoring. Battery life will be drastically reduced. To provide a life of 5 Years, data can only be sent 2 or 3 Times day which is not real Time. Thus please allow the use of solar powered instruments for flow and pressure if real time monitoring is to be performed. Same solar power instruments are being proposed for Water quality analyser as per Item No 2.1.11.4.	As per bid conditions. In battery powered modem, though the number of transmission are limited, the data interval for store and forward is envisaged as 15 minutes. Thus effectively the real time data at shorter interval is acquired.
285	Volume 2 Technical Specifications		141	M/s KROHNE	Forbes Marshall Does not manufacture Electromagnetic Flowmeter, thus please amend the name to KROHNE.	Forbes Marshall shall be read as Khronne Marshall
286	Volume 2 Technical Specifications		141	M/s KROHNE M/s Vega	Kindly also add suggested name in the make as they are leading manufacturers in Level Instrumentation with excellent support within India and locally Bengaluru.	As per bid conditions.
287	Volume 2 Technical Specifications		141	M/S Forbes Marshall M/S HACH M/S Emerson M/S Horiba	Kindly also add suggested name in the make as they are leading manufacturers in Analytical Instrumentation with excellent support within India and locally Bengaluru.	As per bid conditions.
288	Volume 2: Technical Specifications		141	M/S Forbes Marshall M/S HACH M/S Emerson M/S Horiba	Kindly also add suggested name in the make as they are leading manufacturers in Analytical Instrumentation with excellent support within India and locally Bengaluru.	As per bid conditions.
289	Standard Basic Specifications		157	M/S Emerson M/S Forbes Marshall	Kindly also add suggested name in the make as they are leading manufacturers in Automation with excellent support within India and locally Bengaluru.	As per bid conditions.
290	Standard Basic Specifications		158	M/S PC Vue M/s Forbes Marshall	Kindly also add suggested name in the make as they are leading manufacturers in Automation with excellent support within India and locally Bengaluru.	As per bid conditions.
291	Volume 2 Technical Specifications		141	M/S Siemens	Siemens flowmeter are already been used in BWSSB. Thus Please add Siemens Make in the list for Electromagnetic and Ultrasonic flowmeters.	Refer reply to earlier queries.
292	Standard Basic Specifications		158	M/S Cellcomm Solutions M/s Forbes Marshall M/S Halma Water	Kindly also add suggested name in the make as they are leading manufacturers of RTU/Modems with excellent support within India and locally Bengaluru. Same Makes are already being supplied in BWSSB for previous Projects.	As per bid conditions.
293		Volume 1 Section IX- Contract forms		Civil Works, Installation and Testing (schedule 2 and 3)		
		Schedule of payment		The document mentions progressive monthly payment, how will the progress be measured or quantified in terms of percentage. Request clarity on this.		As per bid conditions.
				We request to have part payment (running bills) for supply for upto 70% followed by 20% on erection and 10% on successful commissioning and testing. During the erection period, the contractor can claim the amount in Running bills based on work done at site.		As per bid conditions.
294		Volume 1 Section IX- Contract forms		The sum of schedule 2 of the installation and trial run component only adds up to 90% while Schedule 3 adds up to 110%. please request clarity on this.		Refer Addendum 1.
		Schedule of payment		We request part payment on supply of material and running bills during erection stage with certain percentage held for commissioning.		As per bid conditions.
295				Experience under contracts in the role of the prime contractor (single entity or JV member), Sub contractor for at least last 5 years starting from 2017 onwards.	Sir - As everybody aware that in last 2 years due to pandemic situation development works were not called (tender) by Gov. authorities. Hence we request you to consider experience of 7 years in place of 5 years which is in line with CVC (Central Vigilance Commission) also.	As per bid conditions.



296			<p>Specific Experience SCADA for sewerage Project - The Bidder shall have experience in the role of prime contractor (single entity or JV member) for design, procurement, supply, installation, testing and commissioning of SCADA system for at least one sewerage Treatment plant with a capacity of minimum 100 MLD</p> <p>All the above Works should have been completed and commissioned during last Ten (10) years as on date of submission of Bid</p> <p>Experience Centralized SCADA, Integration and O&M - The bidder shall have experience in the role of Prime contractor (Single entity or JV member) for design, procurement, supply, installation, testing and commissioning of at least one project of Water/sewerage Centralized SCADA of similar capacities (water/sewerage) as specified in criteria 2.4.2(a) or (b) with State Govt Board/ Corporation, for a city with a population similar/equal or greater to Bangalore city population. And integration of more than 15 points of remote stations (inclusive of WTP/STP & Water pumping stations/Sewage pump stations) for the water supply or sewerage projects during the last Five (5) years</p> <p>The Bidder shall have completed comprehensive (Comprehensive Operation & Maintenance = Supply of all manpower for operating the Centralized SCADA system, Supply of all required spares during the complete O&M period, Replacement of existing equipment with new equipment (as required), Supply of all required consumables, inclusive of complete operating cost of the Centralized SCADA system) Operation & Maintenance for the above Centralized SCADA, for a minimum period of continuous Three years, inclusive of DLP period, during the last Five (5) years</p> <p>All the above Works should have been completed during last Five (5) years as on date of submission of Bid</p>	<p>Sir - As everybody aware that in last 2 years due to pandemic situation development works were not called (tender) by Govt authorities. Hence we request you to consider experience of 7 years in place of 5 years which is in line with CVC (Central Vigilance Commission) also</p>	As per bid conditions																
297			<p>Specific Experience Instrumentation - The bidder shall have NABL certified testing & calibration laboratory /Testing & calibration laboratory as per ISO/IEC 17025 for Flowmeter cum transmitter, Pressure Transmitter, and shall demonstrate experience in the role of Prime Contractor (Single entity or JV member) for installation & commissioning of minimum 25 Electromagnetic Flowmeters (Instrumentation) in the distribution network in a single project</p>	<p>Sir -We hereby request you to omit scope of pressure transmitter from NABL Certification as limited bidders having both the facilities in house and bidder can be supplied from different makes We request you to relax this criteria as above for maximum bidder participation</p>	As per bid conditions																
298			<p>The Bidder shall be essentially an original Equipment Manufacturer (OEM) for SCADA software & Automation (PLC) hardware or shall be an Authorized System Integrator/authorized specialist sub-contractor for the OEM for a minimum continuous period for minimum last 10 years period. Note Only one system integrator/authorized specialist sub-contractor per OEM shall be allowed for bidding. If more than one specialist sub-contractor/system integrator for the same OEM shall bid, such bids shall be rejected. The system integrator shall submit authorization certificate signed by not less than Country Head of the OEM with required documentation, certificates, official communication to the system integrator etc</p>	<p>Sir, We request you to amend the clause as follows for widening competition</p> <p>The Bidder shall be essentially an original Equipment Manufacturer (OEM) for SCADA I Flow Meter software & Automation (PLC) hardware or shall be an Authorized System Integrator/authorized specialist sub-contractor for the OEM for a minimum continuous period for minimum last 10 years period. Note Only one system integrator/authorized specialist sub-contractor per OEM shall be allowed for bidding. If more than one specialist sub-contractor/system integrator for the same OEM shall bid, such bids shall be rejected. The system integrator shall submit authorization certificate signed by not less than Country Head / Authorized Authority of the OEM with required documentation, certificates, official communication to the system integrator etc</p>	As per bid conditions																
299			<p>Submission of audited balance sheets or if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last five (5) years to demonstrate the current soundness of the Bidder's financial position and its prospective long-term profitability</p> <p>As the minimum requirement, Bidder's net worth calculated as the difference between total assets and total liabilities should be positive</p> <p>Minimum average annual turnover of USD 11 Million calculated as total certified payments received for contracts in progress and 1 or completed, within the last 5 years divided by 5 years</p>	<p>As everybody aware that in last 2 years due to pandemic situation development works were not called (tender) by Govt authorities. Hence we request you to consider experience of 7 years in place of 5 years which is in line with CVC (Central Vigilance Commission) also</p>	As per bid conditions																
300			<p>(i) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as USD 1 \$ Million for the subject contract(s) net of the Bidders other commitments</p> <p>(ii) The bidder should have a minimum available application capacity of USD 11 million. Application capacity = {[maximum value of works executed during one financial year in the last five years] x [Number of years for completion of the works] x (2.5)} - [value of the existing commitments in all ongoing civil works to be completed during the next three years]</p>	<p>Sir -As per standard tendering practice, evaluation authority uses escalation weightage uses for the turnover as follows and then arrives average turnover. We request you to adopt the same for this tender too</p> <p>Year Multiply Factor</p> <table border="1"> <tr><td>2021-2022</td><td>1.0</td></tr> <tr><td>2020-2021</td><td>1.10</td></tr> <tr><td>2019-2020</td><td>1.21</td></tr> <tr><td>2018-2019</td><td>1.33</td></tr> <tr><td>2017-2018</td><td>1.46</td></tr> <tr><td>2016-2017</td><td>1.61</td></tr> <tr><td>2015-2016</td><td>1.77</td></tr> <tr><td>2014-2015</td><td>1.95</td></tr> </table>	2021-2022	1.0	2020-2021	1.10	2019-2020	1.21	2018-2019	1.33	2017-2018	1.46	2016-2017	1.61	2015-2016	1.77	2014-2015	1.95	As per bid conditions
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301	Volume-1	<p>Qualification EQC-11 2.4.2 (a)</p>	<p>Specific Experience SCADA for Water Supply Project Requirement of Certificate verification</p>	<p>a We request you to clarify if TIA is going to verify the submitted experience credential submitted to meet the Pre qualification conditions through Email/Letter to the certifying Authority</p> <p>b In continuation to the above, Please confirm if there will be any visit to site for verification of the operational status of the projects where the bidder have submitted as experience to meet the Pre-Qualification Criteria</p> <p>c In such a cases as mentioned in (b) point above, please confirm as to who will bear the expenses of such visit</p>	<p>Confirmed BWSSB will verify the submitted experience credential documentation submitted for pre qualification conditions through e-mail and letter to the certifying authority</p> <p>Confirmed BWSSB reserves the right to visit any site for verification of the operational status of the projects as in normal practice under this type of contracts</p> <p>BWSSB shall bear the expense of such visits</p>																
302	Notes for Applicant (1)		<p>The Bidder Shall be OEM or Authorised System Integrator of SCADA and RTU</p>	<p>We understand that the Authorised SI shall be in continuous relationship with same OEM for past 10 Years and the all the experiences from the OEM shall be of the same OEM and of the same product i.e SCADA software and PLC/RTU. Please confirm.</p>	<p>confirmed Authorised SI shall be in continuous relationship with same OEM only for past 10 Years and all the experiences certificates from the OEM shall be of the same OEM and of the same product i.e SCADA software or PLC</p>																
303	Section -1 Technical Specification Clause 2.31 Page No. 71/373			<p>We understand that the co-ordinator will be selced by BWSSB. We request you to suggest the maximum monthly Salary and other expenses to be considered for the Coordinator. We also request you to suggest the number of years of experience planned for the co-ordinators post.</p>	<p>Shall be considered as per industry standards. The number of years of experience shall be 7-10 years</p>																
304	Section -1 Clause 9.8 Flowmeter		<p>Flow calibration rig Duly Accredited according to ISO/IEC 17025</p>	<p>We understand that this requirement to ensure that irrespective of Manufacturing location of the product, the Instrument should meet global standards and shall have global installation track record. Please confirm.</p>	<p>Confirmed the instrument shall meet global standards and shall have global installation track record on a minimum Experience certificates shall be submitted for the same</p>																

