



WAPCOS LIMITED
(A Government of India Undertaking)
Ministry of Jal Shakti, Department of River Development & Ganga
Rejuvenation, Government of India

e-TENDER FOR

SUPPLY, INSTALLATION AND COMMISSIONING OF DIGITAL WATER LEVEL
RECORDER (DWLR) WITH TELEMENTRY SYSTEM IN MUZAFFARPUR AND
SAMASTIPUR DISTRICTS OF BIHAR

NIT NO: WAP/WR&WS-GWRD&M/ARS/BIHAR/AUG/2026-2027/03

(VOLUME-I: TECHNICAL BID)

(VOLUME-II: FINANCIAL BID)

WAPCOS LTD.

76-C, Institutional Area,
Sector-18, Gurugram,
Haryana – 122015
E-mail: gwrldm@wapcos.co.in
Website: www.wapcos.gov.in

August, 2026

**SUPPLY, INSTALLATION AND COMMISSIONING OF DIGITAL WATER LEVEL
RECORDER (DWLR) WITH TELEMENTRY SYSTEM IN MUZAFFARPUR AND
SAMASTIPUR DISTRICTS OF BIHAR**

VOLUME - I
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ACRONYMS	
ACC	Additional Condition of Contract
AMC	Annual Maintenance Contract
BDS	BID DATA SHEET
CIF	Cost, Insurance and Freight
CIP	Carriage and Insurance Paid to (named place of destination)
CPM	Critical Path Method
DDP	Delivered Duty Paid (named place of destination)
EDI	Electronic Data Interchange
EXW	Ex-factory, Ex Works or Ex Warehouse
FCA	Free Carrier
FOB	Free on Board
GCC	General Conditions of Contract
IFB	Invitation for Bids
ITB	Instructions to Bidder
SCC	Special Condition of Contract

WAPCOS LIMITED
(A Government of India Undertaking)
Ministry of Jal Shakti, Department of River Development & Ganga Rejuvenation,
Government of India
76-C, Institutional Area, Sector-18, Gurugram, Haryana – 122015
NOTICE INVITING e- TENDER

For and on behalf of WAPCOS Limited, Dy. Chief Engineer (WR&WS) invites online item rate tender two bid system (Technical bid and financial bid) at Central Public Procurement Portal (CPPP) at <https://etenders.gov.in/eprocure/app> from approved and eligible, experienced, reputed, technically competent and financially sound registered contractors of C.P.W.D (B&R/Civil/Drilling/Equipment)/State P.W.D (Buildings and Roads wing)/Railways/M.E.S or any other Government Department/Organisation for the under mentioned work:

Project Name: Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar.

Scope of Work for: Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar including maintenance of completed DWLR for 05 (five) years of continuous real-time data generation from the date of commissioning of each respective DWLR.

Table-I

Table 1

Description	Estimated Cost (INR) excluding GST	EMD (INR)	Time Period for completion of work	Tender Fees in INR (including GST@18%)
Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar.	56,27,778/-	1,12,556/-	03 Months	5,900/-
Time Frame for Submission of Tender Document		Date	Time	
1	Dates of Online Publication of Tender Documents in CPP portal		10.08.2026	1700 Hrs.
2	Dates of Tender Document Download	Start	10.08.2026	1700 Hrs.
		End	31.08.2026	1500 Hrs.
3	Deadline for seeking further information/clarifications through email		17.08.2026	1700 Hrs.
4	Date of Pre-Bid Meeting		19.08.2026	1500 Hrs.
5	Dates of Online Submission of Tender	Start	19.08.2026	1700 Hrs.
		End	31.08.2026	1600 Hrs.
6	Deadline for Physical Submission of Power of Attorney (PoA), Tender Fee, Solvency Certificate, EMD and Bid Documents in Original Hard Copy		31.08.2026	1700 Hrs.
7	Time and Date for Opening of Technical Bid		01.09.2026	1600 Hrs.
8	Time and Date for Opening of Financial Bid		Will be communicated online after technical evaluation.	

Note: - Above schedule is tentative and may be changed.

1. A complete set of Tender documents may be downloaded by interested bidders from the <https://etenders.gov.in/eprocure/app> and <https://www.wapcos.co.in/english/currenttender/> websites. The bidders must pay non- refundable tender fee. Tender fee payment made through NEFT/RTGS will take 24 hours for its reconciliation. Hence, the payments through NEFT/RTGS should be made at least TWO BANK WORKING DAYS in advance before any due date the scanned copy of challans uploaded in the e-Tender website as a token of payment. The details of Bank Account are as under:

Invoice Reference Beneficiary	:	WAPCOS Limited
Account Number	:	193502000000405
Bank Name	:	Indian Overseas Bank
IFSC Code	:	IOBA0001935
Bank Contact Number	:	0124-2342323
2. Bidding will be conducted online competitive bidding procedures two bid system (Technical bid and Financial bid) specified in the Guidelines. The Bidder shall have satisfactory experience and position as stipulated in bidding documents under clause of eligibility and qualification requirements.
3. Interested eligible bidders may obtain further information and inspect the bidding documents at the same address.
4. Joint Venture/Consortium is not allowed to participate in the bidding process.
5. WAPCOS Ltd. will award contract to the bidder on the lowest rates, whose bid has been determined to be substantially responsive to the Bidding Documents.
6. Accepting Authority reserves the right to accept or reject any or all of tender documents without assigning any reason whatsoever
7. In the event of any of the above mentioned tender opening date being declared as a holiday/closed day for the purchase organization, the tenders will be opened on the next working day at the appointed time.
8. Bids shall be received online only at the website of CPP portal <https://etenders.gov.in/eprocure/app>.
9. Aspiring bidders who have not enrolled/ registered in CPP portal are advised to enrol/register before participating through the portal. The bidders are advised to go through the instructions provided Under ITB clause 1.17 'Instructions for online bid submission'.
10. The bidders will be at liberty to be present either in person or through an authorized representative, who must carry 'Bid Acknowledgement Receipt', at the time of opening of bid or can view the bid opening event online at their remote end.
11. The above particulars may be changed due to Administrative or any other reason and shall be available at CPP Portal and <https://www.wapcos.co.in/english/currenttender/> website. Therefore, bidders are requested to visit CPP Portal and <https://www.wapcos.co.in/english/currenttender/> websites frequently for any change above.
12. For any assistance during bid submission, system settings etc. bidders may contact at CPP Portal help desk.

Postal Address/ Physical Address:

**Deputy Chief Engineer (WR&WS),
WAPCOS Limited
76-C, Institutional Area,
Sector-18, Gurugram,
Haryana – 122015
E-mail: gwrmd@wapcos.co.in
Website: www.wapcos.gov.in**

**For and on behalf of WAPCOS Limited
Dy. Chief Engineer (WR&WS)**

Instruction to Bidders

CHAPTER – I**INSTRUCTION TO BIDDERS****TABLE OF CONTENTS**

CLAUSE NO	TITLE OF CLAUSE
1.1	Invitation to Bid
1.2	Eligibility and Qualification Requirements (EQR)
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1.28	Notification of Award
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CHAPTER – I
INSTRUCTION TO BIDDERS

A. GENERAL	
1.1 Invitation to Bid	For and on behalf of WAPCOS Limited, Deputy Chief Engineer(WR&WS) invites online item rate tender two bid system (Technical bid and financial bid) at Central Public Procurement Portal (CPPP) at https://etenders.gov.in/eprocure/app from approved and eligible, experienced, reputed, technically competent and financially sound registered contractors of C.P.W.D (B&R/Civil/Drilling/Equipment)/State P.W.D (Buildings and Roads wing)/Railways/M.E.S or any other Government Department/Organisation for the under mentioned work: Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar. 1.1.1 Scope of Work: Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar including maintenance of completed DWLR for 05 (five) years of continuous real-time data generation from the date of commissioning of each respective DWLR. All materials provided by contractor, should be as per technical specifications and BOQ given in the tender documents. Transportation of all men, machinery & material to construction works at site, necessary for accomplishing all the features of the works detailed above shall also be provided by the Contractor. All the inspected materials shall be stored in the store of contractor and will be verified by WAPCOS representatives/officers before utilization for construction of structures.
1.2 Eligibility and Qualification Requirements (EQR)	Bidders are advised to carefully read and adhere to all instructions, terms and conditions stipulated in the tender documents. All submissions in the support of EQR, must strictly conform to the prescribed formats and clauses as specified therein. If the submitted bid documents by the bidder does not comply or fulfil to the requirements as per tender, his tender will be liable to be rejected. WAPCOS reserves its right to, but without any obligation to do so, seek any shortfall information/documents only in case of historical documents that pre-existed at the time of the bid opening, and which have not undergone change since then and does not grant any undue advantage to any bidder. Queries /Clarifications received from any bidder after 17.08.2026 shall not be entertained. Authority to Sign the Tender a) In case of proprietary firm, the Proprietor shall sign with full name, current address OR by the authorized person holding Notarized Power of Attorney issued by the Proprietor for signing of business

	proposal. The Power of Attorney shall be submitted in original and shall be specific to this Bid submission only and mentioning the name of the work/project. b) In case of a Limited Company or Corporation, the Application shall be signed by an authorized person holding the Power of Attorney for signing of business proposal. A certified copy of the Power of Attorney shall accompany the Application. Note: Powers of Attorney duly notarized and on a stamp paper of appropriate value, issued for signing the tender documents, make corrections/ modifications, to interact with the Employer and act as the contact person, shall be submitted along with Technical Bid. This invitation to bid is open to any bidder meeting the following requirements : The bidder shall be qualified for the contract as notified by the Employer in subsequent clauses. 1.2.1 Bidder should have registered for GST (Goods & Service Tax) and provide GSTIN certificate for the State where work is to be executed and PAN Card. If not registered till date of submission of bid, bidder will give an undertaking on bidder letter head stating that they will get registered in GST as per Govt. norms before submitting of 1st bill of executed works. 1.2.2 The Bidder should be approved and eligible registered contractors of C.P.W.D(B&R/Civil/Drilling/Equipments)/State P.W.D (Buildings and Roads wing/Equipments)/Railways /M.E.S or any other Government Department/Organisation and tendering limit of bidder should be more than the estimated cost of bid for execution of DWLR work. Copy of Certificate of Incorporation/ Registration/Partnership Deed Registration or any other relevant document, as applicable, should be submitted along with a copy of address proof. The bidder will submit Name, address, details of the organization, Name(s) of the Owner/partners/promoters and Directors of the firm/company as prescribed in Form-B1. The bidder should have EPF registration. 1.2.3 The work completion certificate should mention the details of work executed and the date of completion of the work in the last seven year and in hand should be certified by an officer not below the rank of First-class officers or equivalent. The work completion certificate should be as per standard format. The work experience certificate should carry e-mail ID and postal address of the issuing authority. 1.2.4 The bidder must have experience of successfully completed similar works during last 07 years ending previous day of last date of submission of Tenders: Three (03) similar completed works each costing not less than the amount equal to 40% of the estimated cost put to tender. Or Two (02) similar completed works each costing not less than the
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	amount equal to 50% of the estimated cost put to tender. Or One (01) similar completed work costing not less than the amount equal to 80% of the estimated cost put to tender Definition of Similar Nature of Work: Works related to Supply, Installation, Commissioning and Operation & Maintenance of Digital Water Level Recorder (DWLR) with Telemetry System. The value of the work done declared is to be without GST/Taxes. For the works, where the Taxes or GST is not clearly defined, the value of works shall be considered as including GST and GST @12% shall be deducted for the works completed up to 31.12.2021 and GST @18% shall be deducted for the works completed after 01.01.2022 to establish the value of work done. The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 07% per annum; calculated from the date of completion to previous day of last date of submission of tenders. The past experience in similar nature of work should be supported by certificates issued by the Client's Department/Organization. In case, the works/certificates are not verified by the issuing authority, WAPCOS reserves the right to not consider for the award of works. Verification should be done from the official email id of issuing Authorities. The bidder will provide official e-mail, Landline number of the Issuing Authorities in prescribed Form-C(c) with undertaking. Bidder will ensure the email ids and landline are in working condition. If certificates are not verified by the issuing authority, then it may not be considered for technical evaluation. 1.2.5 The average annual financial turnover of the bidder from DWLR/Equipments works during the immediate last consecutive three years shall not be less than 50% of the estimated cost ending 31st March 2026. Year in which no turnover is shown would also be considered for working out the average. The turnover, profit, net worth (positive during the last financial year 2025-26) certificates for last five financial years (2021-22 to 2025-26) are to be submitted and must be certified by the statutory auditor of the firm/company. Any such certificate must carry the UDIN (Unique Document Identification Number). 1.2.6 The bidder should not have incurred any loss (profit after tax should be positive) in more than two year during available last five consecutive Balance Sheets, duly certified and audited by the chartered accountant. Bidder shall attach balance sheet and profit & loss statement in support of Form-A1 Note: This certificates will be verified through ICAI Portal using UDIN number mentioned in Form-A1 There is no need to upload entire voluminous balance sheet.
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However, summarized balance sheet (audited) and summarized profit & loss account (audited) for last 05 years shall be uploaded.

- 1.2.7 The bidder should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Accordingly, Bidder shall submit Bank Solvency Certificate issued from a Nationalized/Scheduled Commercial Bank approved by Reserve Bank of India (RBI) for a sum of at least 40% of the estimated cost of the work. The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana specific to this Bid submission only and mentioning the name of the work/project. The certificate shall be submitted in original and the colour/b&w copy/scanned copy shall not be accepted. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate.

In case of MSME bidders, a Banker's Certificate indicating general worthiness or Credit Line/Sanction Letter from Scheduled/Nationalized Bank as applicable may be provided.

Verification should be done from the official email id of issuing Authorities. The bidder will provide official e-mail, Landline number of the Issuing Authorities in prescribed Form with undertaking. Bidder will ensure the email ids and landline are in working condition. If Certificate is not verified by the issuing authority, then it may not be considered for technical evaluation.

- 1.2.8 The bidder shall have sufficient construction equipment's, field testing equipment/machinery and skilled dedicated service Engineer cum operator & manpower to carry out the works and shall submit details along with documentary proof of such machinery and manpower, which he proposes to deploy.

Table-II

Manpower (Regular)	Minimum Required Nos.
Skilled Dedicated Service Engineer cum Operator (Post Graduate/Graduate-minimum 10 years of experience)	2

Minimum Manpower as stated above should be arranged by the bidder and in addition to above, the bidder shall, as and when required, deploy additional manpower, machinery, equipment, and other resources at the site to meet the project requirements and ensure completion of the work within the stipulated contract period. The bidder will submit "undertaking for manpower and machineries/equipments deployment" as prescribed in **Form-E**.

If bidder failed to deploy manpower and machineries/equipments within mobilisation period as mentioned in the tender documents, WAPCOS is free to terminate the contract at any time & forfeit the Bank Guarantee and blacklist the bidder.

	1.2.9 The Bidder should give an undertaking that they will supply DWLR as a reputed DWLR OEM/Authorized supplier only and clearly mentioning the numbers of DWLR to be supplied by each OEM/authorized supplier as per specifications of DWLRs mentioned in the Tender Document. 1.2.10 Bidder will be required to deploy at least 02 (two) dedicated Service Engineer cum operator at the Regional office Data Centre for Operation of DWLR system and ensure seamless data transfer from remote DWLR stations to RODC through FTP, then to NDC and WRIS/WIMS server through API. The undertakings for employment of this ground water professional are to be given. The bidder should have after sales support in the region (within a Jurisdiction of state where) for Digital Water Level Recorders stations with GSM/GPRS based telemetry. If bidder does not have any after sales support within a Jurisdiction of state where at the time of bidding, he shall be required to establish the same before after successful award of contract. The undertaking regarding this is to be given. The bidder shall submit the product brochure/literature, compliance statement duly signed by the bidder and other supporting document if any to establish the claim that the offered equipment meets the technical specifications provided in tender document. If there is any deviation in specification it should be mentioned in separate column of compliance statement. 1.2.11 The blacklisting policy of the company is available on official website of WAPCOS Limited. The bidder/tenderer/consultant/contractors have to mandatorily furnish an undertaking addressing the same to Engineer-in-Charge in the form of certificate to abide the contents of blacklisting policy. The format of undertaking is provided at Form-H. Any action in violation of the blacklisting policy or to the certificate furnished shall result in cancellation of tender at the stage before or after the award of work. 1.2.12 Bid Capacity as prescribed in Form-D. The bidder should possess the bidding capacity as calculated by the specified formula. The formula generally used is: Available bid capacity = $A \times 1.5 \times N - B$, where A=Maximum value of DWLR (similar nature of work as defined and relevant to work being procured) works executed in any one year during the last five years (updated at the current price level), taking into account the completed as well as works in progress. N=Number of years prescribed for completion of the work in question. B=Value (updated at the current price level) of the existing commitments and ongoing works to be completed in the next 'N'
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	years. Note: - <u>Implementation Plan</u> In view of time bound completion of the project, successful bidder shall <table><tr><th>Location</th><th>Type of DWLR</th><th>Total Number of Wells</th><th>Minimum Number of Team to be deployed in one go</th><th>Time allowed for completion of Project</th><th>Remarks</th></tr><tr><td>Muzaffarpur and Samastipur Districts of Bihar.</td><td>Digital Water Level Recorders stations with GSM/GPRS based telemetry</td><td>09 Nos.</td><td>02 Nos.</td><td>03 Months</td><td>Each team should have independent requisite manpower & machinery and other infrastructure</td></tr></table> adhere to the implementation plan as given below table: Table-III Note: - 1. Bidder should note that milestones prescribed above shall be monitored on daily/weekly/monthly basis for outcome. In case, progress is not achieved as per milestone, WAPCOS shall be free to cancel work in addition to the implementation of LD Clause and forfeiture of performance security. 2. Regarding quality, Bidder is bound to follow the technical specifications and directions of WAPCOS's representative. 3. Photos/Videos of each activity for each structure will be submitted along with each bill submitted for payment by the contractor.	Location	Type of DWLR	Total Number of Wells	Minimum Number of Team to be deployed in one go	Time allowed for completion of Project	Remarks	Muzaffarpur and Samastipur Districts of Bihar.	Digital Water Level Recorders stations with GSM/GPRS based telemetry	09 Nos.	02 Nos.	03 Months	Each team should have independent requisite manpower & machinery and other infrastructure
Location	Type of DWLR	Total Number of Wells	Minimum Number of Team to be deployed in one go	Time allowed for completion of Project	Remarks								
Muzaffarpur and Samastipur Districts of Bihar.	Digital Water Level Recorders stations with GSM/GPRS based telemetry	09 Nos.	02 Nos.	03 Months	Each team should have independent requisite manpower & machinery and other infrastructure								
1.3 Cost of Bidding	The bidder shall bear all costs associated with preparation and submission of his bid and WAPCOS shall in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.												
1.4 Site Visit	Site visit will be conducted on 24-08-2026 and 25-08-2026 from 09:00 AM onwards. WAPCOS Contact person for site visit will be available at Muzaffarpur/Samastipur, Bihar (Contact: e-mail: gwrdm@wapcos.co.in). It is advised to bidders to send senior representative with proper authorization letter of bidder during site visit for actual assessment of the project site location and scope of works. The cost of visiting the site shall be at the bidder's own expense.												
	Note: If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.												
B. THE BIDDING DOCUMENTS													
1.5 Contents of Bidding Documents	1.5.1 The bidding documents together with any addenda thereto, issued in accordance with Para 1.7 and any Minutes of pre-bid Meeting issued in accordance with Para 1.15 will include the following: Volume-I:												

Technical Bid		
S.No.	Chapter	Contents
1		Notice Inviting e-Tender
2	I	Instruction to Bidders (ITB)
3	II	General Condition of Contract (GCC)
4	III	Additional Condition of Contract (ACC)
5	IV	Technical Specifications (TS)
Form		Contents
Sub-Form 'A1':		Financial Information
Sub-Form "A2":		Form of Bankers' Certificate from a Scheduled Bank
Sub-Form "A3":		Form of Solvency Certificate
Sub-Form "B1":		Structure & Organisation
Sub-Form "B2":		Details of Technical & Administrative Personnel to be employed for the Work
Sub-Form "B3":		List of Construction Machineries/Equipment Proposed to be deployed
Sub-Form C1:		Format for Similar Works Awarded/Presently under Construction
Sub-Form C2:		Details for Proof of Payment in Respect of Works
Sub-Form C3:		Correspondence Details of Issuing Authority
Form- D:		Bid Capacity
Form- E:		Undertaking for Manpower Deployment
Form-F:		No-Conviction Certificate
Form-G:		No Deviation Certificate
Form-H:		Undertaking Regarding Blacklisting/Non Debarment
Form-I:		Undertaking for Not Corrupt/Fraudulent Practices
Form-J:		Undertaking For Rule 144 (Xi) in the General Financial Rules-2017
Form-K:		Preference to Make In India (Undertaking Regarding Percentage of Local Content)
Form-L:		Litigation History
Form-M:		Site Visit/Understanding the Project Site Certificate of Intending Bidder
Schedules:		Schedules 1 to 8
Annexures:		
Annex-I:		Proforma for Bank Guarantee For Earnest Money Deposit
Annex-II:		Proforma for Bid (To be enclosed with Price Bid)
Annex-III:		Proforma of Agreement
Annex-IV:		Proforma for Bank Guarantee for Performance Security
Annex-V:		Proforma for Bank Guarantee for Advance Mobilization
Annex-VI:		Proforma for Tender form
Annex-VII:		Declaration by Bidder(s)
Annex-VIII:		Format for letter and integrity pact
Checklist:		
Volume-II:		
1		Price Bid (Bill of Quantities)

	1.5.2 The bidder is expected to examine carefully all instructions, conditions, proforma, terms & specifications and drawings in the Bidding Documents. Failure to comply with the requirement of bid submission will be at the bidder's own risk. Pursuant to Para 1.24, bids which are not substantially responsive to the requirements of the bidding document will be rejected.
1.6 Clarification of Bidding Documents and Pre-Bid Meeting	A prospective bidder requiring any clarification of the Bidding Documents may notify in writing to the Deputy Chief Engineer (WR&WS), WAPCOS, who will respond in writing or by e-mail to any request for clarification which he receives earlier than the time schedule mentioned in NIT. WAPCOS response (including a description of the enquiry but without its source) will be replied on CPP portal.
1.7 Amendment of Bidding Documents	1.7.1 At any time prior to the deadline for submission of bids, WAPCOS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by the issuance of an Addendum. 1.7.2 The corrigendum if any will be uploaded on CPP portal. 1.7.3 In order to afford prospective bidders reasonable time in which to take an corrigendum into account in preparing their bids, WAPCOS may, at its discretion, extend the deadline for the submission of bids in accordance with Para 1.18. A minimum period of 5 days will be provided to enable bidders to assess the implications of the corrigendum.
C. PREPARATION OF BIDS	
1.8 Language of Bid	The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and WAPCOS shall be written in the English language.
1.9 Documents Comprising the Bid	The bid to be prepared by the bidder shall be on two bid system (Technical bid and financial bid) basis and shall comprise of the following: 1. Technical Bid (Marked as Volume-1 on CPP Portal) i. Scan copy of completed tender documents with required Certificates, Forms, Schedules and Annexures used thereto duly filled in and signed wherever required without altering the formats. 2. Financial Bid (marked as Volume-2 on CPP Portal). i. Bill of Quantities with rates filled in figures and correctly calculated amount, in appropriate columns. NOTE: Volume-2 will be opened only after satisfying that the bidder meets the eligibility requirements after technical evaluation. Any lapse in providing documentary evidence towards meeting the eligibility requirement may lead to non-opening of Volume -2 of the bidder and thus rejection of his/her bid. The sequence/order of the documents should be followed as per CHECKLIST ENCLOSED in the tender document.
1.10 Bid Price	1.10.1 The contract shall be based on the unit rates/prices submitted by the bidder. 1.10.2 The bidder should quote his rates for each item only subjected to

	fulfilment of Eligibility and Qualification Requirements (EQR) as per para-1.2. 1.10.3 The bidder shall fill in rates and prices for all items of Works described in the Bill of Quantities including all duties, taxes, fees, levies, labour cess, seigniorage fee, court/arbitration fees, legal expenses, and similar statutory or contractual liabilities arising out of procurement of materials on behalf of the Client and execution/administration of contractor(s) under the Project Works, etc. (except GST). 1.10.4 Any bid, which proposes any alteration in the work specified in the said form of bidding document, or in the time allowed for carrying out the work or which contains any other conditions of any sort including conditional rebates, will be summarily rejected. 1.10.5 In event no rate has been quoted for any item (s), leaving space both in figure (s), word (s) and amount blank, it will be presumed that the contractor has included the cost of this/ these item (s) in other items and rate for such item (s) will be considered as zero and work will be required to be executed accordingly. 1.10.6 In respect of GST, same shall be paid by the contractor to the concerned department and it will be reimbursed to him by Engineer-in-charge after satisfying that it has been actually and genuinely paid by the contractor only if contractor submit proof of payment of GST. The contractor shall furnish return on GST portal from time to time and WAPCOS will have the right to withhold the payment if GST returns are not covering the bill raised to WAPCOS. Contractor shall submit the following documents with the proposals for reimbursement of GST: - A copy of GSTR-I; - A copy of GSTR-3B; and - CA certificate indicating details of invoices against which the payment under GSTR-3B has been made.
1.11 Currencies of bid and Payment	1.11.1 The unit rates and prices shall be quoted by the bidder entirely in Indian Rupees (INR).
1.12 Bid Validity Period	1.12.1 Bids shall remain valid for acceptance for a period of 120 days (one hundred twenty days) from the date of opening of bids prescribed in Para 1.20 hereof. 1.12.2 In exceptional circumstances, prior to expiry of the original bid validity period, WAPCOS may request the bidder for a specified extension in the period of validity. A bidder agreeing to the request will be required to extend the validity of his Earnest Money Deposit correspondingly. The provisions of Para 1.13 regarding discharge and forfeiture of Earnest Money Deposit shall continue to apply during the extended period of bid validity.
1.13 Earnest Money Deposit/Bid Security	1.13.1 The bidder shall furnish, as part of his bid, an earnest money deposit for an amount as listed in Table-I of tender document. 1.13.2 The Earnest Money Deposit shall at the bidder's option be in any one of the following alternatives forms: In the form of Insurance Surety Bonds/Account Payee Demand Draft/Fixed Deposit Receipt/Banker's Cheque or Payment through RTGS/NEFT in favor of 'WAPCOS Limited' payable at Gurugram, Haryana.

	b) Irrevocable Bank Guarantee including e- Bank Guarantee issued by any Nationalized/Scheduled Commercial Bank approved by Reserve Bank of India (RBI), and pledged in favour of 'WAPCOS Limited'. The Performa for the Bank Guarantee shall be in accordance with Annexure-I. 1.13.3 The earnest money deposit shall be made payable to WAPCOS Limited without any condition (s) or reservations in respect of bank drafts. Earnest money deposit shall remain valid for 60 days beyond the period of validity of the bid. The bank account as per details: Name of Bank: Indian Overseas Bank Bank Account Number: 193502000000405 IFSC Code: IOBA0001935 Branch Name: National Horticulture Board (NHB) Building, G-85, Industrial Area, Sector-18, Gurugram-122015, Haryana 1.13.4 a) The bid can only be submitted after deposition of EMD in favour of WAPCOS Ltd. in the form prescribed in tender documents and upload the mandatory scanned documents such as receipt for deposition of EMD and other documents specified. b) Any bid not accompanied by an acceptable earnest money deposit will be rejected by WAPCOS as non-responsive. 1.13.5 The Earnest Money Deposit of unsuccessful bidders will be discharged /returned as promptly as possible, but not later than sixty days (60 days) after expiration of the period of bid validity prescribed by WAPCOS. The Earnest money will be returned to the bidder without any interest if his bid is not accepted without any interest. In the case of cancellation of tender, the Earnest Money Deposit of all participated bidders will be discharged /returned as promptly as possible, but not later than sixty days after expiration of the period of bid validity prescribed by WAPCOS. The Earnest money will be returned to the bidder without any interest if his bid is not accepted without any interest. 1.13.6 The Earnest Money Deposit of the successful bidder will be discharged when the bidder has signed the agreement and furnished the required performance security. 1.13.7 No interest shall be paid by WAPCOS Limited on the Earnest Money Deposit. 1.13.8 The Earnest Money Deposit may be forfeited; a) If a bidder withdraws or amends his bid during the period of bid validity b) Impairs or derogates from the bid in any respect within the period of validity of the bid; c) If the bidder does not accept the correction of his bid price during evaluation. d) In case of successful bidder, if he fails within the specified time limit to:- sign the Agreement, or furnish the required Performance Security
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1.14 Bidding Condition	The bidder shall submit offers which comply fully with the requirements of the Bidding Documents.
1.15 Pre-Bid Meeting	1.15.1 A pre-bid meeting, open to all prospective bidders who have purchased the Bidding documents is contemplated to be convened in WAPCOS office at Deputy Chief Engineer (WR&WS), WAPCOS, 76-C, Institutional Area, Sector-18, Gurgaon, Haryana – 122015 on 19.08.2026 at 1500 Hrs in the committee room of WAPCOS. Any change in the time and date of the pre-bid meeting shall be notified to the bidders 2 (two) days in advance. 1.15.2 The purpose of this meeting will be to issue clarifications and to answer queries on any matter that may be raised on the bidding document. The bidder is requested to submit queries, in writing to reach the office of the Deputy Chief Engineer(WR&WS), WAPCOS, 76-C, Institutional Area, Sector-18, Gurgaon, Haryana – 122015, e-mail: gwrldm@wapcos.co.in not later than 1 (one) days before the meeting.
1.16 Preparation of Bids	1.16.1 Bidder should take into account any corrigendum/addendum published on the tender document before submitting their bids. 1.16.2 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid. 1.16.3 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/XLS/RAR/DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. 1.16.4 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
D. SUBMISSION OF BIDS	
1.17 Instruction for Online Bid Submission	The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the (CPPP) at https://etenders.gov.in/eprocure/app

	1.17.1 Registration 1) Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: https://etenders.gov.in/eprocure/app) by clicking on the link “Online bidder Enrolment” on the CPP Portal. 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts. 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal. 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile. 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse. 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token. 1.17.2 Searching for tender documents 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal. 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document. 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk. 1.17.3 PREPARATION OF BIDS 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids. 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to
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	be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid. 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process. 1.17.4 SUBMISSION OF BIDS 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues. 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document. 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument. 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered /given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected. 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online,
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	without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected. 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission. 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers. 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers. 9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the date and time of submission of the bid with all other relevant details. 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings. 1.17.5 ASSISTANCE TO BIDDERS 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender. 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is Toll Free No. 1800 3070 2232 and Mobile Nos 91 7878007972 and 91 7878007973.
1.18 Deadline for Submission of e-Bids and Submission of offline Bid (Hard	1.18.1 The e-bids must be submitted, not later than 1600 Hrs on 31.08.2026 1.18.2 WAPCOS may, at its discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Para 1.7 in which case all rights and obligations of WAPCOS and the bidder previously subject to the original deadline shall thereafter be subject to the new deadline as extended. 1.18.3 Submission of offline Bid Documents The proper binded, above qualifying documents arranged & page numbered by bidder along with check list on top with signed &

Copy)	stamped on each page shall be submitted in one (1) separate sealed envelope clearly labeled as “TECHNICAL BID” for the Work (Write Name of Work as mentioned in NIT) along with details of bidder Address, Phone, E-mail on Envelope. Note:- The above offline documents shall be submitted by bidder on WAPCOS address as per date & time mentioned in NIT, otherwise bids will be rejected. The financial bid is not to be submitted physically. However, the same is only to be uploaded online.
1.19 Modifications and Withdrawal of Bids	1.19.1 The bidder may modify or withdraw his submitted bid, through CPP portal.
E. BID OPENING AND EVALUATION	
1.20 Bid Opening	1.20.1 The bid contained in envelope will be opened online at the time of opening of bids, the tenderer can view the bid opening event online at their remote end also. 1.20.2 In case the date of opening happens to be a closed holiday, the tenders will be opened at 12:00 hours on the next working day.
1.21 Process to be Confidential	1.21.1 After the public opening of bids, information relating to the examination, clarification, evaluation and comparison of bids and recommendation concerning the award of Contract shall not be disclosed to bidders or other person not officially concerned with such process. 1.21.2 Any effort by a bidder to influence WAPCOS in the process of examination, clarification, evaluation and comparison of bids, and in decisions concerning award of Contract, may result in the rejection of his bid. 1.21.3 The Contractor shall not communicate or use in advertising, publicity or in any other medium, photograph or other reproduction of the Works under this Contract, or description of the site, dimensions, quantity, quality or other information, concerning the Works unless prior written permission has been obtained from the Deputy Chief Engineer (WR&WS), WAPCOS, Gurugram. 1.21.4 All documents, correspondence, decisions and other matters concerning the Contract shall be considered confidential and of restricted nature by the Contractor and he shall not divulge or allow access thereto by any unauthorized persons.
1.22 Clarification of Bids	During technical evaluation of tenders, the department may, at its discretion, ask the bidder for a clarification of its tender, for which no charges shall be paid to the bidder. The request for clarification and the response shall be in writing and no change in prices or substance of the Tender shall be sought, offered or permitted. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the tenderer who resort to canvassing will be liable to rejection.
1.23 Determination of Responsiveness	1.23.1 The bidder has to quote his rates for all items subjected to eligibility and qualification requirement as indicated in Instruction to bidders. 1.23.2 Prior to the detailed evaluation of bids, WAPCOS will determine whether each technical bid is techno-commercially substantially responsive to the requirements of the Bidding Documents. 1.23.3 For the purpose of the Para.1.23 a substantially responsive bid is one

	which fulfils the Eligibility and Qualification Requirements in accordance with Para 1.2 and conforms to all the terms, conditions and specifications of the Bidding Documents without material deviation or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of the Works, or which limits in any substantial way, inconsistent with the Bidding Documents, WAPCOS' has rights or the bidder's obligations under the Contract and the rectification of which deviation or reservation would affect unfairly the comparative position of other bidders presenting substantially responsive bids. 1.23.4 The technical evaluation shall be made for the bidder's proposed method of Construction, Construction programme, order / sequence of the Work and proposed resources assigned to do the Work to determine his capability. 1.23.5 If the technical bid is not substantially responsive to the requirements of the Bidding Documents, or the proposed construction methods are clearly impracticable, it will be rejected by WAPCOS and may not subsequently be made responsive by the bidder having corrected or withdrawn the non-conforming deviation or reservation. 1.23.6 The price bids of only those bidders will be considered whose Techno-Commercial bids have been found to be substantially responsive to the requirements of the Bidding Documents. The date and venue for the opening of the price bid shall be notified separately and communicated to the eligible and technically qualified bidders. The price bids along with bid securities of the bidders whose Techno- Commercial bids have been declared non-responsive, shall be returned unopened to the bidders. The price bid of qualified bidders shall be opened in the presence of the intending bidders or their authorized representatives who wish to be present, on notified date by WAPCOS.
1.24 Correction of Errors	All corrections/cuttings in the tender document shall be initialled by the bidder.
1.25 Evaluation and Comparison of Tenders	1.25.1 In evaluating tenders, WAPCOS will determine, for each tender, the Evaluated Tender Price by adjusting the Tenders Price. 1.25.2 WAPCOS will evaluate tenders and award the Contract to the techno-commercially acceptable responsive contractors offering the lowest Evaluated Tender Price. 1.25.3 WAPCOS reserves the right to accept or reject any variation, deviation or alternative offers. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the Tender Document or otherwise result in the accrual of unsolicited benefits to contractor shall not be taken into account in tender evaluation.
F. AWARD OF CONTRACT	
1.26 Award Criteria	Subject to Para 1.27 , WAPCOS will award Contract to the bidder whose bid had been determined to be substantially responsive to the Bidding Documents and who has offered lowest price bid. Accordingly work will be awarded to lowest bidder.
1.27 WAPCOS's Right to Accept any Bid and to Reject	Notwithstanding Para 1.26, WAPCOS reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform

any or all Bids	the affected bidders or bidder of the grounds for WAPCOS's action.
1.28 Notification of Award	1.28.1 Prior to the expiration of the period of bid validity prescribed by WAPCOS or any extension thereof, WAPCOS will notify the successful bidder in writing by registered letter, that his bid has been accepted. 1.28.2 The notification of award will constitute the formation of the Contract. 1.28.3 Upon the furnishing by the successful bidder of a Performance Security in accordance with the provisions of para 1.30, WAPCOS will promptly notify the unsuccessful bidders that their bids have been unsuccessful.
1.29 Signing of Agreement	1.29.1 Within 7 (Seven) days of issue of the Letter of Acceptance, on a date and time mutually agreed upon, the successful bidder or his authorized representative shall attend the office of the Deputy Chief Engineer (WR&WS) for signing of the Agreement. The Performa for Agreement is as at Annex – III. 1.29.2 Failure of the successful bidder to comply with the requirement of Para 1.29.1 will constitute sufficient grounds for the annulment of the award and forfeiture of the Earnest Money Deposit.
1.30 Performance Security	1.30.1 Within 07 (Seven) days of the receipt of the notification of award (issue of letter of acceptance) from WAPCOS but not later than the date of the signing of the agreement, the successful bidder shall furnish to WAPCOS, a Performance Security in the form of a bank guarantee for an amount of 05% (five percent) of the contract price in accordance with the conditions of the contract 1.30.2 The performance security provided by the successful bidder in the form of Bank Guarantee shall be in favour of WAPCOS issued by the state bank of India or any scheduled Indian Bank. The Bank Guarantee shall be on the Performa attached at Annex-IV. 1.30.3 Failure of the successful bidder to comply with the requirement of Para 1.29 and 1.30 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Earnest Money Deposit. 1.30.4 Should the contract period, for whatever reasons be extended, the contractor On the receipt of written request from the Engineer-in-Charge, shall at his own cost get the validity period of Bank Guarantee in respect of Performance Security furnished by him extended and shall furnish the extended/ revised Bank Guarantee to the Engineer-in-Charge, one month before the expiry date of the Bank Guarantee originally furnished. 1.30.5 The performance security shall be refunded to the contractor after completion of the work, duly issue of completion certificate by CGWB's authorities and taking over of completed work and after expiry of maintenance period whichever is later.
1.31 Time Period	The total time period for completion of the works is as mentioned in notice inviting e-tender from the date of handing over of site. This time period includes a period of 15 (Fifteen) days for preparation and mobilization of men and equipment to handed over sites. Authorities will have the time of 15 days for the handing over of sites to contractor after signing of the contract agreement. “The time schedule for completion of works will be strictly adhered to and no cost or time overrun in completion of the project should take place. Therefore no cost overrun shall be mentioned”

1.32 Mobilization	The Contractor will be fully responsible for transportation/mobilization, including insurance, of his manpower and equipment to site. The Contractor has to ensure safe and timely delivery of its equipment to site so as to complete the works within stipulated time period.
1.33 Signing of the Contract	No payment for the work done will be made unless the contract is signed by the contractor.
1.34 Integrity Pact (IP)	1.34.1 An agreement on prescribed format (Annex-VIII) between the prospective bidder and the purchaser, committing the persons/officials of both sides, not to resort to any corrupt practices in any aspect/stage of the contract shall be signed. 1.34.2 Only those vendors/bidders, who commit themselves to such a pact by the purchaser, would be considered competent to participate in the bidding process.

General Conditions of Contract

CHAPTER – II
GENERAL CONDITIONS OF CONTRACT
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CHAPTER – II
GENERAL CONDITIONS OF CONTRACT

Definitions	
Clause –1	In the Contract, as hereinafter defined, the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires: i) "WAPCOS" means WAPCOS Ltd. who will employ the Contractor. ii) "Contractor" means the person or persons, firm or company whose bid has been accepted by WAPCOS and includes the Contractor's personal representatives, successors and permitted assigns. iii) "Engineer-in-Charge" means the Engineer-in-Charge appointed from time to time by WAPCOS and notified in writing to the Contractor to act as the Engineer-in-Charge for the purposes of the Contract. iv) "Engineer-in-Charge's Representative" means any Resident Engineer or assistant of the Engineer-in-Charge appointed from time to time by WAPCOS or the Engineer-in-Charge to perform the duties mentioned in Clause-2 hereof, whose authority shall be notified in writing to the Contractor by the Engineer-in-Charge. v) "Works" shall include both Permanent Works and Temporary Works. vi) "Temporary works" means all temporary works of every kind required in or about the execution or maintenance of Works. vii) "Permanent Works" means the permanent works to be executed and maintained in accordance with the Contract. viii) "Contract" means the Conditions Governing the Contract, Technical Specifications, Drawings, priced Bill of Quantities, Letter of Acceptance and the Contract Agreement. ix) "Contract Price" or "Contract Value" means the sum indicated in the Letter of Acceptance. x) "GST" means Goods and Service Tax xi) "Plant and Equipment" or "Machinery" means and include plant, equipment, machinery, tools, appliances, other implements of all description or things of whatsoever nature required in or about the execution, or maintenance of the Works but does not include materials or other things intended to form or forming part of the Permanent Works. xii) "Specifications" means the Technical specifications and other Specifications referred to in the Bidding Documents and any modification thereof or addition thereto or deduction there from as may from time to time be furnished or approved in writing by the Engineer- in-Charge. xiii) "Drawings" means the drawings referred to in the Specifications and any modification of such drawings approved in writing by the Engineer-in-Charge and such drawings, as may, from time to time, be furnished or approved in writing by the Engineer-in-Charge. xiv) "Site" means the land and other places on, under, in or through which the Permanent Works or Temporary Works, designed by the Engineer-in-Charge are to be executed and any other lands and places provided by WAPCOS for the purposes of working space or any other purpose as may be specifically designated in the Contract or subsequently approved as forming part of site. xv) "Approved" means approved in writing, including subsequent written

	confirmation of previous verbal approval and "approval" means approval in writing including as aforesaid. xvi) "General Manager" means the Chief Engineer-in-Charge of the Works or his successor and to whom the Engineer-in-Charge reports. xvii) "Gol" means Government of India. xviii) "Sub-Contractor" means the party or parties having direct contract with the Contractor and to whom any part of the Contract has been sublet by the Contractor with the consent, in writing, of the Engineer-in-Charge. xix) "Manufacturer" means the party proposing to manufacture the equipment and materials as specified complete or in part. xx) "Letter of Acceptance" means the letter from WAPCOS conveying acceptance of the bid subject to such reservations as may have been stated therein. xxi) "Tonne or Metric Tonne" means 1,000 kgs (one thousand kilograms). Metric system shall be followed in all interpretation and execution of Works under this Contract. Any conversion found necessary shall be in accordance with the figures given in 'Indian Standard'; IS 786-1967 and subsequent revision(s) of this Standard. xxii) "B.I.S." means Bureau of Indian Standard specifications with latest amendments or revisions as currently in force at the time of execution of the Works. xxiii) "Day" means a day from midnight to midnight. xxiv) "Month" means from the beginning of a given date of a calendar month to the end of the preceding date of the next calendar month. xxv) "Week" means seven consecutive days. xxvi) "Shift" means total number of hours which each group of workers have to operate for the day. xxvii) "Quarter" means a period of three consecutive months starting from January, April, July and October i.e. January to March, April to June, July to September and October to December. xxviii) "Near Relative" means wife/husband, parents and grandparents, children, first cousins, brothers-in-law, sisters-in-law and parents-in-law. xxix) "Words in singular number shall include the plural number and vice-versa where the context so requires. "He" shall include "She" and vice-versa. xxx) "Cost" mean all expenditure properly incurred or to be incurred whether on or off the site including overhead and other charges allocable thereto but does not include any allowance for profit. The headings in these conditions of the Contract shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract. xxxi) "Competent Authority" means Chief Executive Director (WR&WS), WAPCOS Limited.
Clause – 2	Interpretation Where the context so requires words imparting the singular or masculine term also include plural or feminine and vice versa. Headings have no significance. Words have their normal meaning under the language of the Contract unless especially defined. If the Contractor discovers any ambiguity, omission, error, faults and other defect in the Contract Documents, he shall immediately notify the same in

	writing to the Engineer, who will resolve the ambiguity or correct the error and will notify the Contractor of the interpretation to be adopted.
Clause – 3	Priority of Contract Document The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence: - the Contract Agreement - the Letter of Acceptance - the Letter of Tender with priced Bill of Quantities, - these Conditions of Contract - the Specification, - the Drawings, and - the Schedules and any other documents forming part of the Contract.
Clause – 4	Duties and powers of Engineer-in-Charge and Engineer-in-Charge's Representative(s). - The Engineer-in-Charge shall carry out such duties in issuing decisions, certificates and orders as are specified in the Contract. - The Engineer-in-charge's representative(s) shall be responsible to the Engineer-in-Charge, and his duties are to watch and supervise the Works and to test and examine any materials to be used or workmen employed in connection with the Works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor, except as expressly provided hereunder or elsewhere in the Contract, to order any Work involving delay or any extra payment by the Engineer-in-Charge, nor to make any variation of or in the Works. - The Engineer-in-Charge may, from time to time in writing, delegate to the Engineer-in-Charge's Representative(s) any of the powers and authorities vested in the Engineer-in-Charge and shall furnish to the Contractor a copy of all such written delegations of Powers and authorities. Any written instructions or approval given by the Engineer-in- Charge's Representative(s) to the Contractor within the terms of such delegation, but not otherwise, shall bind the Contractor as though it had been given by the Engineer-in-Charge. Provided always as follows: - Failure of the Engineer-in-Charge's Representative(s) to disapprove any Work or materials shall not prejudice the powers of the Engineer-in-Charge thereafter to disapprove such Work or materials and to order the pulling down, removal or breaking up thereof. - If the Contractor shall be dissatisfied by reason of any decision of the Engineer-in-Charge's Representative(s), he shall be entitled to refer the matter to the Engineer-in-Charge, who shall there upon confirm, reverse or vary such decision.
Clause –5	Assignment The Contractor shall not assign the Contract or any part thereof, or any benefit or interest therein of there under, otherwise than by a charge in favour of the Contractor's bankers of any money due or to become due under this Contract, without the prior written consent of WAPCOS.

Clause – 6	Sub-Letting The Contractor shall not sub-let the whole/part of the Works. Except where otherwise provided by the Contract, the Contractor shall not sub-let any part of the Works without the prior written consent of the Engineer-in-Charge.
CONTRACT DOCUMENTS	
Clause – 7	Language and Law i) a) The Contract documents shall be drawn up in English. All correspondence and documents relating to the bid, exchanged by the bidder and WAPCOS, shall be submitted in the prescribed form in English. All supporting documents and printed literature in connection with the bid shall be in English. b) The Law, which shall apply to the contract, is to be subject and according to which the contract is to be construed shall be the law for the time being in force in India within the jurisdiction of Delhi High Courts, New Delhi. ii) Documents Mutually Explanatory Several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the documents shall take precedence in the order in which they are set out in the Performa of Agreement (Annex-III).
Clause – 8	Drawings i) Custody of Drawings The drawings shall remain in the sole custody of the Engineer-in-Charge, but two copies thereof shall be furnished to the Contractor free of charge. The Contractor shall provide and make, at his own expense, any further copies required by him. At the completion of the Contract, the Contractor shall return to the Engineer-in-Charge all drawings provided under the contract. One copy of the drawings, furnished to the Contractor as aforesaid, shall be kept by the Contractor on the Site.
Clause – 9	Further Drawings and Instructions The Engineer-in-Charge shall have full power and authority to supply to the Contractor from time to time, during the progress of the Works, such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works. The Contractor shall carry out and be bound by the same.
Clause – 10	Contractor's General Responsibilities i) The Contractor shall, subject to the provisions of the Contract, and with due care and diligence, execute and maintain the Works and provide all labour, including the supervision thereof, materials, equipment and all other things, whether of a temporary or permanent nature, required in and for such execution and maintenance, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. ii) The Contractor shall take full responsibility for the adequacy, stability and safety

	of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works, or for the design or specification of any Temporary Works prepared by the Engineer-in-Charge. iii) The Contractor shall promptly inform the Engineer-in-Charge of any error, omission, fault and other defect in the design of or specifications for the Works which are discovered when reviewing the Bidding Documents or in the process of execution of the Works. iv) Where no specifications have been laid down, the materials used and the Work done shall confirm to the relevant B.I.S. Code or any Internationally accepted Standards or as directed by the Engineer-in-Charge. v) All instructions and orders given by the Engineer-in-Charge at site are to be maintained in the Site Instruction Book and shall be taken to have been conveyed to the Contractor for his compliance. vi) The Contractor must have arrangements to receive normal correspondence on working days and urgent correspondence on all days. vii) Contractor shall exercise all professional care, skill and diligence in the performance of the services under the agreement and shall carry out all its responsibilities in accordance with recognized professional standards. viii) Contractor shall be responsible and accountable to WAPCOS, Government of India, for satisfactory execution and performance of the work, including fulfilment of all services and obligations entrusted to contractor under the provisions of this contract. ix) Contractor shall provide full cooperation and access for audit and inspection for all project related documents.
Clause-11	Contract Agreement The Contractor shall, when called upon so to do, enter into and execute a Contract Agreement, to be prepared and completed at the cost of Contractor in the Proforma annexed with such modification as may be necessary.
Clause-12	Performance Security i) For the due performance of the contract, the Bid shall contain an undertaking by the contractor to obtain, when required, a guarantee of bank to be jointly and severally bound with the Contractor to WAPCOS in a sum not exceeding that stated in the Letter of Acceptance for such guarantee, the said bank and the terms of the said guarantee shall be such as shall be approved by WAPCOS. The obtaining of such guarantee and the cost of the guarantee to be so entered into shall be at the expense in all respects of the contractor, unless the Contractor otherwise provides. ii) The performances security shall be in the form of bank guarantee. The amount of the bank guarantee (as per format Annexure-IV) shall be 05% (five percent) of the Contract price. The bank guarantee shall be issued/confirmed by the State Bank of India or any Scheduled Indian Bank payable at Gurugram and should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the contractor including maintenance period of 01 year. iii) The performance Security will be released by WAPCOS, after completion, acceptance and handing over of the work or after maintenance period of 01

	year whichever is later. iv) Confirmation of Bank Guarantee submitted to WAPCOS shall be got done from issuing Bank through SFMS, as per details given below: Indian Overseas Bank NHB, Gurgaon Branch Code: 1935 IFSC Code: IOBA0001935 Beneficiary: WAPCOS Limited This shall also be applicable in respect of extension of BGs already furnished to the WAPCOS Ltd. v) Failure of the successful bidder to comply with the requirement of above clause, shall constitute sufficient grounds for the annulment of the award and forfeiture of the Earnest Money Deposit. vi) Should the contract period, for whatever reasons be extended, the contractor on the receipt of written request from the Engineer-in-Charge, shall at his own cost get the validity period of Bank Guarantee in respect of Performance Security furnished by him extended and shall furnish the extended/ revised Bank Guarantee to the Engineer-in-Charge, one month before the expiry date of the Bank Guarantee originally furnished. vii) Performance security will be forfeited and credited to the purchaser's account in the event of a breach of contract by the contractor.
Clause-13	Inspection of Site i) The Contractor shall be responsible for his own interpretation. ii) The Contractor shall also be deemed to have been fully aware of the Site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his bid, as to the form and nature thereof, including the subsurface conditions, the hydrological and climatic conditions, the extent and nature of work, and materials necessary for the completion of the Works, means of access to the Site and the accommodation he may require and in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risk contingencies and all other circumstances which may influence or affect his Bid.
Clause –14	Sufficiency of Bid The Contractor shall be deemed to have satisfied himself before bidding as to the correctness and sufficiency of his Bid for the Works and of the rates and prices stated in the priced Bill of Quantities and the Schedule of Rates and Prices, if any, which Bid rates and prices shall, except in-so-far as it is otherwise provided in the Contract, which shall cover all his obligations under the Contract, and all matters and things necessary for the proper execution and maintenance of the Works.
Clause –15	Works to be to the Satisfaction of Engineer-in-Charge Save in-so-far as it is legally or physically impossible the Contractor shall execute and maintain the Works in strict accordance with the Contract to the satisfaction of the Engineer-in-Charge and shall comply with and adhere strictly to the Engineer-in-Charge's instructions and directions on any matter whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions and directions only from the Engineer-in-Charge.
Clause – 16	Programme to be furnished i) Within a period of seven days of issue of letter of acceptance by WAPCOS, the

	Contractor shall submit to the Engineer-in-Charge for his approval, two copies of a construction programme showing the order of procedure in which he proposes to carry out the Works. Program submitted by contractor should commensurate with the mile stone given under Clause 16 (ii) ii) The detailed construction programme submitted by the Contractor for orderly completion of the Works, shall show planned sequence of operations and the dates for commencement and completion of all salient feature of the Works so as to complete the works in scheduled time. iii) The programme shall cover activities on the Site and procurement and delivery activities. iv) In any such case the authority may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the authority, within 30 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the contractor for extension of time E-in-C after affording opportunity to the contractor, may give, supported with a programme, a fair and reasonable extension within a reasonable period of occurrence of the event.
Clause –17	Contractor's Superintendence The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer-in-Charge may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorized agent or representative approved of in writing by the Engineer-in-Charge, which approval may at any time be withdrawn, is to be constantly on the Works and shall give his whole time to the superintendence of the same. If such approval shall be withdrawn by the Engineer-in-Charge, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving written notice of such withdrawal, remove the agent from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another agent approved by the Engineer-in- Charge. Such authorized agent or representative shall receive, on behalf of the Contractor, directions and instructions from the Engineer-in-Charge.

Clause –18	Contractor's Employees i) The Contractor shall provide and employ on the Site in connection with the execution and maintenance of the Works: a) Only such technical assistants as are skilled and experienced in their respective trades and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and b) Such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the Works. ii) The Engineer-in-Charge shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or maintenance of the Works who, in the opinion of the Engineer-in-Charge, misconducts himself or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable and such persons shall not be again employed upon the Works without the written permission of the Engineer-in-Charge. Any person so removed from the Works shall be replaced as soon as possible by a competent substitute approved by the Engineer-in-Charge.
Clause – 19	Setting out The Contractor shall be responsible for properly locating the artificial recharge structure in relation to report given by the Engineer-in-Charge in writing and for the correctness, of the position, levels, dimensions of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of Works, any error shall appear or arise in the position, levels, dimensions of the Works, the Contractor, on being required so to do by the Engineer-in-Charge or the Engineer-in-Charge's Representative, shall at his own cost, rectify such error to the satisfaction of the Engineer-in-Charge or the Engineer-in-Charge Representative, unless such error is based on incorrect data supplied in writing by the Engineer-in-Charge or the Engineer-in-Charge's Representative, in which case the expense of rectifying the same shall be borne by WAPCOS. The checking of any setting out of artificial recharge structure regarding location, dimensions or level by the Engineer-in-Charge or the Engineer-in-Charge's Representative shall not in any way relieve the Contractor or his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all control points and other things used in locating the artificial recharge structure.
Clause –20	Site Report The Contractor, in preparing the bid, shall rely on any site investigation reports referred to in contract data, supplemented by any information available to the bidder.

Clause – 21	Watching and Lighting i) The Contractor shall, in connection with the Works, provide and maintain at his own cost, all lights, guards, fencing and watching when and where necessary or required by the Engineer-in-Charge or the Engineer-in-Charge's Representative, or by any duly constituted authority, for the protection of the Works, or for the safety and convenience of the public or others. ii) The Contractor shall also be responsible for temporary roadways, footways, guards, fences, caution notices etc. as far as the same may be rendered necessary by reason of the Work for the pedestrians or other traffic and owners and occupiers of the adjacent property and of the public and shall remain responsible for any accidents that may occur on account of his failure to take proper and timely precautions. In default thereof, the Engineer-in-Charge may provide such fencing, lights, ventilation and watchmen as he may deem necessary and charge the cost thereof to the Contractor.
Clause – 22	Care of Works i) The Contractor shall take full responsibility for the care of the Works from the date of Commencement of Works until the date of issue of the maintenance Certificate for the whole/part of the Works. ii) In the event of any loss or damage to the Works or any part thereof; during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub-Clauses (v) & (vi) of this Clause, the Contractor, at his own cost, shall rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer-in-Charge. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operation carried out by him for the purpose of complying with his obligations. iii) In the event of any loss or damage to the Permanent Works which may occur or arise out of any of the Risks defined in Sub-Clause (v) of this Clause, the same shall be made good/rectified by the Contractor, if and to the extent required by the Engineer-in-Charge, at the cost of WAPCOS which sum shall be determined by the Engineer-in-Charge. iv) In the event of any loss or damage which may occur or arise out of any of the risks defined in Sub-Clause (vi) of this Clause, neither party to the Contract shall be liable to the other for any such loss or damage. However, in the event of any loss or damage to the Permanent Works arising as a consequence of the risk(s) defined in Sub-Clause (vi) of this Clause the same shall be made good/rectified by the Contractor at the cost of WAPCOS which sum shall be determined by the Engineer-in-Charge under the provisions of the Contract. v) WAPCOS 's risks are as under: a) loss or damage due to the use or occupation by WAPCOS of any section or part of the Permanent Works except as may be provided for in the

	Contract. b) loss or damage to the extent that it is due to the design of the Works other than any part of the design provided by the Contractor. vi) Force Majeure / Excepted risks are as under: a) war, hostilities whether war be declared or not, invasion, act of foreign enemies, act of public enemies. b) ionizing, radiation or contamination by radio activity from any nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly. c) Pressure waves caused by aerial devices traveling at supersonic speeds. d) Riot, commotion or disorder unless solely restricted to employees of the Contractor and arising from the conduct of the Works. e) Any operation of the forces of nature against which an experienced Contractor could not reasonably have been expected to take precautions.
Clause – 23	Insurance of Plant & Equipment The Contractor shall take insurance cover to the replacement value, for the equipment and other things brought on to the site by him.
Clause – 24	Damage to persons and Property The Contractor shall, except if and so far as the Contract provides otherwise, indemnify WAPCOS against all losses and claims in respect of injuries or damage to any persons or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the Works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation or damages for or with respect to injuries or damage to persons or property resulting from any act or neglect of WAPCOS, servants, or other Contractors, not being employed by the Contractor, or for or in respect to any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the compensation as may be just and equitable having regard to the extent of the responsibility of WAPCOS, its servants or agents or other Contractors for the damage or injury.
Clause– 25	Third Party Insurance i) Before commencing the execution of the works the Contractor, but without limiting his obligation and responsibilities under Clause – 24 hereof, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including any employee of WAPCOS, by or arising out of the execution of the Works or in the carrying out of the Contract, otherwise, than due to the matters referred to in the provision to Clause-24 hereof. The contractor shall, whenever required, produce to the Engineer-in-charge or the Engineer-in-charge's Representative the original policy or policies of insurance and the receipts for payment of the current premiums and furnish attested copies thereof. ii) Provision to Indemnify WAPCOS, the terms shall include a provision whereby, in the event of any claim in respect of which the Contractor

	would be entitled to receive indemnity under the policy being brought or made against WAPCOS, the insurer will indemnify WAPCOS against such claims and any costs, charges and expenses in respect thereof. iii) The contractor shall indemnify, defend and hold harmless the WAPCOS/CGWB, its officers, and employees from and against any and all claims, demands, actions, losses, damages, costs, expenses, penalties or liabilities arising out of or in connection with: 1) Any third-party claims, disputes, or direct interactions with third parties engaged by contractor, arising out of or in connection with the execution of the Project. 2) Loss of or damage to property (movable or immovable). 3) Personal injury or death of any person including workers, staff or third parties. 4) Any statutory or regulatory non-compliance by contractor and its parties engaged. 5) Any negligence, error, omission, fraud or willful misconduct on the part of contractor, its employees, or agents. iv) Contractor shall, at their own cost, obtain and maintain valid insurance policies till completion of the Maintenance Period/Defect Liability Period, including but not limited to: 1) Workmen Compensation Insurance as per applicable law. 2) Third Party Liability Insurance. 3) Contractor's All Risk (CAR) Insurance covering the works. 4) Professional Indemnity Insurance covering Project Work services. Copies of valid insurance policies shall be submitted to WAPCOS prior to commencement of construction works. Failure to maintain insurance shall be treated as breach of contract.
Clause – 26	Accident or Injury to Workmen i) WAPCOS shall not be liable for or in respect of any damages or compensation payable according to law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-Contractor, save and except an accident or injury resulting from any act or default of WAPCOS, or servants. The Contractor shall indemnify and keep indemnified WAPCOS against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto. ii) On the occurrence of accident arising out of the Works which result in death, or which is so serious as to be likely to result in death, the Contractor shall, within twenty-four hours of such accident, report in writing to the Engineer-in-Charge and other statutory bodies of the Government the facts stating clearly and in sufficient details the circumstances of such accident and the subsequent action. All other accidents of the Works involving injuries to persons or damage to property other than that of the Contractor shall be promptly reported to the Engineer-in-Charge and other statutory bodies of the Government stating clearly and in sufficient details of the facts and circumstances of the accidents and the action taken. In all cases the Contractor shall indemnify WAPCOS against all loss or damage resulting directly or indirectly from the Contractor's failure to report in the manner aforesaid. This includes penalties or fines, if any,

	payable by WAPCOS as a consequence of failure to give notice or failure to conform to the provisions of any Act in regard to such accidents. iii) Insurance against Accident, etc., to Workmen The Contractor shall insure against such liability with an insurer approved by WAPCOS, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall, when required, produce to the Engineer-in-Charge or the Engineer-in-Charge's Representative such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-Contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-Contractor shall have insured against the liability in respect of such persons in such manner that WAPCOS is indemnified under the policy, but the Contractor shall require such sub-Contractor to produce to the Engineer-in-Charge or the Engineer-in-Charge's Representative, when required, such policy of insurance and the receipt for the payment of the current premium.
Clause – 27	Patent Rights and Royalties i) The Contractor shall save harmless and indemnify WAPCOS from and against all claims and proceedings for or on account of infringement of any patent rights, designs, trademark or name or other protected rights in respect of any machine, work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay, timber or other construction materials required from the Project. ii) In the event of any claims made under or action brought against WAPCOS in respect of any such matters as aforesaid, the Contractor shall be immediately, notified thereof and the Contractor shall be at liberty, at his own expense, to settle any disputes or to conduct any litigation that may arise there from. Provided that the Contractor shall not be liable to indemnify WAPCOS if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.
Clause-28	Interference with Traffic and Adjoining Properties: All operation necessary for the execution of the Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the convenience of the public, or the access to, use and occupation of public or private roads and foot paths to or of properties whether in the possession of WAPCOS or of any person. The Contractor shall save harmless and indemnify WAPCOS in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters in-so-far as the contractor is responsible therefore.
Clause-29	Extraordinary Traffic: i) Protection of Highways and Bridges The Contractor shall use every reasonable means to prevent any of the highways or bridges communicating with or the routes to the Site from being

	damaged or injury by any traffic of the Contractor or any of his Sub-Contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic, as will inevitably arise from the moving of plant and material from and to Site, shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such highways and bridges.
Clause – 30	Contractor to keep Site clear i) During the progress of the Works, the Contractor shall keep the site reasonably free from all unnecessary obstructions and shall store or dispose of any Constructional plant and surplus materials and clear away and remove from the site any wreckage, rubbish or Temporary Works no longer required. ii) In case the Contractor does not keep the area clean and if found necessary to get the area cleaned, the Engineer-in-Charge shall issue a notice of forty eight hours, and in the event of non-compliance by the Contractor, get the area cleaned by some other agency. The cost of such cleaning shall be borne by the Contractor.
Clause – 31	Clearance of Site on Completion On the completion of the Works, the Contractor shall clear away and remove from the Site all Constructional Plant, surplus materials, rubbish and Temporary Works of every kind, and leave the whole of the site and Works clean and in a workman like condition to the satisfaction of the Engineer-in-Charge.
LABOUR	
Clause - 32	(i) Engagement of Labour The Contractor shall make his own arrangements for the engagement of all labour local or otherwise, and, save in-so-far as' the Contract otherwise provides, for the transport, housing, feeding and payment thereof. The Contractor shall not employ in connection with the Works any person who has not completed 18 years of age. No female labour shall be employed. (ii) Supply of Water The Contractor shall, having regard to local conditions, provide on the Site, to the satisfaction of the Engineer-in-Charge or his Representative, an adequate supply of drinking and other water for the use of the Contractor's staff and workmen. (iii) Alcoholic Liquor & Drugs. The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulations or orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor, or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his sub-Contractors, agents or employees. (iv) Disorderly Conduct, etc. The Contractor shall, at all times, take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and

	for the preservation of peace and protection, of persons and property in the neighbourhood of the Works against the same. (v) Contractor to Follow Labour Laws and wage laws of INDIA The Contractor shall, in respect of labour employed by him, comply with the provision of the various labour laws, Minimum Wages issued by Government of India and shall indemnify WAPCOS in respect of all claims that may be made against WAPCOS for non-compliance thereof by the Contractor, Notwithstanding anything contained herein, the Engineer-in-Charge may take such actions as may be necessary for compliance of the various labour laws and recover the costs thereof from the Contractor. (vi) Observance by Sub-Contractors The Contractor shall be responsible for observance by his sub-Contractors of the foregoing provisions.
MATERIALS AND WORKMANSHIP	
Clause – 33	Material and Workmanship Material and Workmanship a) The Contractor shall be responsible for arranging all the materials (except the materials to be supplied by WAPCOS) required for the construction of the Works from the source(s) acceptable to WAPCOS. He shall also be responsible for proper transportation and storage of these materials to the satisfaction of the Engineer-in-Charge and shall bear all related costs. b) The Engineer-in-Charge shall be entitled at any reasonable time, to inspect or examine all such materials. The Contractor shall provide reasonable assistance for such inspection or examination as may be required. c) The contractor shall initiate timely action to procure the materials well in advance so as to ensure that the progress of works does not suffer for want of materials at site at least seven days before these are intended to be used on works. Any setback to the progress of the works and consequent delay in completion of the works on account of non availability of materials at site shall be the sole responsibility of the contractor. d) Any assistance that the Engineer-in-Charge can give to the Contractor for arranging the materials shall be provided on a "no responsibility basis". (ii) Quality of materials and Workmanship and Tests (a) The Contractor shall, provide the materials of the quality, kind and specifications as provided in the Contract. The Contractor shall produce to the Engineer-in- Charge, certified quality test reports in respect of the materials procured by him.

	(b) In case the materials procured by the Contractor are not to the satisfaction of the Engineer-in-Charge and do not conform to the specifications laid in the Contract, such materials shall be rejected by the Engineer-in-Charge and the cost incurred on such procurement shall be the responsibility of the Contractor. (c) The workmanship shall be of the kind described in the Contract and in accordance with the Engineer-in-Charge's instructions. (d) All the materials and the workmanship shall be subjected, from time to time, to such tests as the Engineer-in-Charge may require at the place of manufacture, fabrication or preparations, or on the Site or at such other or places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are required for examining, measuring and testing any material and shall supply samples of materials, before incorporation in the Works, for testing, as may be selected and required by the Engineer-in-Charge. (iii) Cost of Samples All samples shall be supplied by the Contractor at his own cost. (iv) Cost of Tests The cost of making any test intended by or provided for in the Contract shall be borne by the Contractor.
Clause-34	Inspection of Operations The Engineer-in-Charge or any person authorized by him shall, at all times, have access to the Works and to all workshops and places where the Work is being prepared or from where materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.
Clause - 35	Examination of Work before covering up i) No Work shall be covered up or put out of view without the approval of the Engineer-in-Charge or his Representative and the Contractor shall afford full opportunity for the Engineer-in-Charge or the Engineer-in-Charge's Representative to examine and measure any work which is about to be covered up or put out of view. The Contractor shall give due notice whenever any such work is or are ready or about to be ready for examination and the Engineer-in-Charge or the Engineer-in-Charge's Representative shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work.
Clause- 36	Removal of Improper Work and Materials i) The Engineer-in-Charge shall have power to issue instructions from time to time for; - the removal from the Site, within such time or times as may be specified in the instructions, of any materials which, in the opinion of the Engineer-in-Charge, are not in accordance with the Contract, - the substitution of proper and suitable materials, and - The removal and proper re-execution, notwithstanding any previous test

	thereof or payment therefore, of any work which in respect of materials or workmanship is not, in the opinion of the Engineer-in-Charge, in accordance with the Contract. ii) Default of Contractor in Compliance In case of default on the part of the Contractor in carrying out such instruction, as specified in sub clause (i) of this clause, the Engineer-in-Charge shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Engineer-in-Charge or may be deducted from any money due or which may become due to the Contractor.
Clause-37	Suspension of Work i) The Contractor shall, on the written order of the Engineer-in-Charge, suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer-in-Charge may consider necessary and shall, during such suspension, properly protect and secure the Works, or such part thereof, so far as is necessary in the opinion of the Engineer-in-Charge. The extra cost incurred by the Contractor in giving effect to the instructions of the Engineer-in-Charge under this Clause shall be borne and paid by WAPCOS unless such suspension is : a) otherwise provided for in the Contract, or b) necessary by reason of some default of or breach of Contract by the Contractor, or c) necessary by reasons of climatic conditions on the Site, or d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof in so far as such necessity does not arise from any act or default by the Engineer-in-Charge or from any of the risks defined in Sub-Clause-20(vi) hereof, Provided that the Contractor shall not be entitled to recover any such extra cost unless he gives written notice of his intention to claim to the Engineer-in-Charge within fifteen days of the order of the Engineer-in-Charge. The Engineer-in-Charge shall settle and determine such extra payment and/or extension of time under Clause-44 hereof to be made to the Contractor in respect of such claim as shall, in the opinion of the Engineer-in-Charge be fair and reasonable.
COMMENCEMENT AND DELAYS	
Clause- 38	Commencement of Works The Contractor shall commence the actual works on Site within a period of Fifteen (15) days after the issue of letter of acceptance.
Clause - 39	Possession of Site i) Save in so far as the Contract may prescribe, the extent of portions of the Site of which the Contractor is to be given possession from time to time, and in which such portion shall be made available to the Contractor, and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Engineer-in-Charge will after issuing written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the

	Contractor to commence and proceed with the execution of the Works in accordance with the programme. The Contractor shall not be allowed to occupy other Government and/or WAPCOS land for temporary use or otherwise without the prior consent of the Engineer-in-Charge. ii) Rights of Way and Facilities The Contractor shall bear all costs and charges for special or temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide, at his own cost, any additional facilities outside the Site required by him for the purpose of the Works.
Clause –40	Time for Completion The period of completion of the whole of the Work shall be as shown under notice inviting e-tender from the date of handing over of site or such extended time as may be allowed. The period of completion shall be reckoned from the date of issue of letter of acceptance (excluding 15 days) to the successful bidder. The authorities will hand over the sites from the date of signing of contract agreement.
Clause – 41	Extension of Time for Completion Should the amount of extra or additional work of any kind or any cause of delay referred to in these Conditions, or exceptional adverse climatic conditions, or other special circumstances of any kind whatsoever which may occur, other than through a default of the Contractor, be such as fairly to entitle the Contractor to an extension of time for the Completion of the Works, the Engineer-in-Charge shall determine the period of such extension and shall notify the Contractor accordingly. Provided that the Engineer-in-Charge is not bound to take into account any extra or additional or other special circumstances unless the Contractor has, within 15 days after such work has been commenced, or such circumstances have arisen, or as soon thereafter as is practicable, submitted to the Engineer-in-Charge, full and detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.
Clause – 42	Shift Works i) To achieve the required progress, the Work may be required to be carried out round the clock. The period of completion and number of working days shall not be affected by the number of shifts each day. No extra amount on account of any shift work is payable to the Contractor. ii) Whenever the Work is carried out at night, adequate lighting of working areas and access paths shall be provided by the Contractor at his cost. Sufficient notice shall be given by the Contractor to the Engineer-in-Charge regarding details of Works in Shift so that necessary supervision could be provided.
Clause – 43	Rate of Progress If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works at any time is not commensurate with the rate of progress stipulated in Clause (16) of this Clause and in the opinion of the Engineer-in-Charge does not ensure completion by the prescribed time or extended time for completion, the Engineer-in-Charge shall so notify the Contractor in writing and the

	Contractor shall thereupon take such steps as are necessary and the Engineer-in-Charge may approve to expedite progress so as to complete the Works by the prescribed time or extended time. The Contractor shall not be entitled to any additional payment for taking such steps.
Clause-44	Liquidated Damages for Delay If contractor fails to maintain the required progress as given in Table-I & Table-III on or before the original scheduled date of completion, it shall without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as compensation the amount calculated at the rates stipulated below: The Contractor shall seek Extension of Time in advance, and in any case before the expiry of the final scheduled completion date of the overall project or the last handed-over site, to avoid any contractual issue during execution. If any site/structure is not completed within its stipulated 06-month construction period, liquidated damages shall be leviable in respect of the delayed site/structure only, without prejudice to the completion of other sites/structures. The rate of liquidated damages and the maximum ceiling shall be as specified elsewhere in the Contract. COMPENSATION FOR DELAY OF WORK: (1)% (one percent) per month of delay or part thereof, based on the balance work (amount) as per submission of verified Utilization Certificate and maximum applicable LD shall not exceed 10% of the accepted Tendered Value of Work. These LD charges will be applicable except for the circumstances which are beyond the control of Contractor and subject to force majeure conditions not prevailing.
Clause – 45	Certification of Completion of Works When the whole of the Works have been substantially completed and have satisfactorily passed any final test that may be prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer-in-Charge or to the Engineer-in-Charge's Representative(s) accompanied by an undertaking mentioning that all the works have been finished. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor for the Engineer-in-Charge to issue a Certificate of Completion in respect of the Works. The Engineer-in-Charge shall, within twenty-one days of the date of delivery of such notice either issue to the Contractor, a Certificate of Completion stating the date on which, in his opinion, the Works are substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the Works which, in the Engineer-in-Charge's opinion, are required to be done by the Contractor before the issue of such Certificate. The Engineer-in-Charge shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Certificate of Completion within twenty-one days of completion to the satisfaction of the Engineer-in-Charge of the Works so specified and making good any defects so notified.
MAINTENANCE AND DEFECTS	
Clause – 46	Maintenance and Defects

	i) Period of Maintenance/ Defect Liability Period: In these conditions, the expression “Period of Maintenance/Defect Liability Period” shall mean a period of 12 months after completion, acceptance of work and handover of structure/site to the WAPCOS, CGWB and State Govt. Department whichever will be later. If any defect is found during construction and the Period of Maintenance/Defect Liability Period, Contractor will be solely responsible for correcting the same. During the Period of Maintenance/Defect Liability Period, Contractor will also maintain the structures. ii) Execution of Work of Repair etc. To the intent that the Works shall, at or as soon as practicable after the expiration of the Period of Maintenance be delivered to WAPCOS in the condition required by the Contract, fair, wear and tear excepted, to the satisfaction of the Engineer-in-Charge, the Contractor shall complete the Work, if any, outstanding on the date of completion, as certified under Clause-48 hereof, as soon as practicable after such date and shall execute all such work of repair, amendment, rectification and making good defects, imperfections, other faults as may be required of the Contractor in writing by the Engineer-in-Charge during period of Maintenance or within seven days after its expiration, as a result of an inspection made by or on behalf of the Engineer-in-Charge prior to its expiration. iii) Cost of Execution of works of Repair, etc. All repair works (except physical damage by miscreants) shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer-in-Charge be due to the use of materials or workmanship not in accordance with the Contract, or due to neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract. If, in the opinion of the Engineer-in-Charge such necessity shall be due to any other cause, the value of such work shall be ascertained and paid for as if it were additional work. iv) Remedy on Contractor's Failure to carry out Work Required If the Contractor shall fail to do any such work as aforesaid required by the Engineer-in-Charge, WAPCOS shall be entitled to employ and pay other persons to carry out the same and if such work is the work which, in the opinion of the Engineer-in-Charge, the Contractor was liable to do at his own expense under the Contract, then all expenses consequent there-on or incidental thereto shall be recoverable from the Contractor by the Engineer-in-Charge from any money due or which may become due to the Contractor.
Clause -47	Contractor to Search The Contractor shall, if required by the Engineer-in-Charge in writing, search under the directions of the Engineer-in-Charge for the cause of any defect, imperfection or fault appearing during the progress of the Works and during the period of maintenance. Unless such defect, imperfection or fault is one for which the Contractor is liable under the Contract, the cost of work carried out by the Contractor in searching as aforesaid shall be borne by WAPCOS. If such defect, imperfection or fault shall be one for which the Contractor is liable as aforesaid, the

	cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case repair, rectify and make good such defect, imperfection or fault at his own expense.
ALTERNATIONS, ADDITIONS, OMISSIONS AND EXTRA ITEMS	
Clause – 48	Variations i) The Engineer-in-Charge shall make any variation in the form, quality or quantity of the Works or any part thereof or substitution for original specifications, design, drawings and instructions that may, in his opinion be necessary and for that purpose, or if for any other reason it shall, in his opinion be appropriate, he shall have power to order the Contractor to do and the Contractor shall do any or all of the following: a) increase or decrease the quantity of any work included in the Contract, b) omit or substitute any such work, c) change the character or quality or kind of any such work d) execute additional work of any kind necessary for the completion of the Works, and e) change any specified sequence or timing of construction or any part of the Works. ii) Quantity of an item may increase and quantity of other item may decrease depending upon the sub surface geology. No such variations shall in any way vitiate or invalidate the Contract, but the effect if any, of all such variations shall be valued on which he agreed to do the Work hereof. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of Contract by the Contractor or for which he is responsible, any additional Cost attributable to such default shall be borne by the Contractor. Any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as part of the work, shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main Work. iii) The Unit Rates entered in the Bill of Quantities for the individual items shall apply for the quantities of Work as per actual execution of each item. However if quantities are deviated from the quantities specified in tender documents, prior written approval of the competent authority shall be taken before executing the deviated work. In case of deviated work, payment shall only be made for the work for which prior written approval of competent authority has been obtained.
Clause – 49	Expenditure incurred towards additional, extra, substituted, or deviation items that are essential and unavoidable for completion of the work, including admissible contractual escalation, shall be permissible provided the rates are derived strictly in accordance with Government of India norms, GFR 2017 provisions, MoP 2025 guidelines, and relevant contract conditions, subject to the following: i. In case of increase in BOQ quantities, prior intimation, technical justification, recommendation of the Engineer-in-Charge, and approval of the Competent Authority shall be obtained before execution/payment. ii. For execution of new items beyond the original tender scope, prior intimation and recommendation of the Engineer-in-Charge and approval of Competent Authority shall be mandatory before

commencement of such works.

- iii. Rates for increase/decrease in BOQ quantities, substituted items, and new items shall be determined strictly in accordance with the applicable provisions of GFR 2017, MoP 2025 guidelines, and relevant contractual conditions, and shall be subject to approval of the Competent Authority, wherever required.

Deviations / Variations Extent and Pricing

The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of no availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

49.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows:

- i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus
- ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

49.2 Deviation, Substituted Items and Pricing.

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the rate of the extra item shall be determined as below:

- i) In case, extra item is available in Basic Schedule Rate-2025/2026, Water Resourced Department, Government of Bihar, the rate payable for extra item to the contractor shall be as given in Basic Schedule Rate-2025/2026.
- ii) In case, extra item is not available in Basic Schedule Rate-2025/2026, Water Resourced Department, Government of Bihar, then contractor may within fifteen days of receipt of order or occurrence of the item(s), submit the market rate claim rates, supported by proper analysis which shall include invoices, vouchers etc. and Manufacturer's specification for the work failing which the rate approved later by the Engineer-in-charge shall be binding and the Engineer-in-Charge shall within prescribed time limit of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined, failing which it will be deemed to have been approved.

Deviation, Substituted Items and Pricing.

In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para.

- i) In case, Substituted Items is available in Basic Schedule Rate-2025/2026, Water Resourced Department, Government of Bihar, the rate payable for Substituted

	Items to the contractor shall be as given in Basic Schedule Rate-2025/2026. In case substituted item is not available in Basic Schedule Rate-2025/2026, Water Resourced Department, Government of Bihar, Rate for substituted item shall be determined in the manner as mentioned in the following para ii) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). iii) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). Deviations, Deviated Quantities, Pricing In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in tender document if any, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above-mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within prescribed time limit of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates (as per invoice, vouchers from the manufacturers or suppliers submitted by the agency and duly verified by Engineer in Charge or his representative) and the contractor shall be paid in accordance with the rates so determined. The prescribed time limit for finalizing rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items is within 45 days after submission of proposal by the contractor without observation of the Engineer-in-Charge. 49.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in tender document if any, and the Engineer-in- Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates. 49.4 The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. 49.5 For the purpose of operation of this tender, the following works shall be treated as works relating to foundation unless & otherwise defined in the contract: i) For Buildings: All works up to 1.2 meters above ground level or up to floor 1 level whichever is lower. ii) For abutments, piers and well staining: All works up to 1.2 m above the bed level. iii) For retaining walls, wing walls, compound walls, chimneys, overhead
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	reservoirs/ tanks and other elevated structures: All works up to 1.2 meters above the ground level. iv) For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 meters above the ground level. v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower. vi) For Roads, all items of excavation and filling including treatment of sub base. vii) For Check Dams/Anicuts: All work upto apron top level. 49.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while quoting tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.
PLANT, EQUIPMENT, TEMPORARY WORKS AND MATERIALS	
Clause – 50	Equipment, Temporary Works and Materials i) Contractor to Provide Equipment The Contractor shall provide at his own expense all plant, Temporary Work and Equipment, materials and Camps specified under para 1.1 of Chapter I of this document required for the execution of the Works. He shall furnish along with the bid a list of items of all machinery which he shall be deploying on the particular job. He shall also make necessary arrangements for supplementing them at his own expense, if required to do so by the Engineer-in-Charge at the time of acceptance of the Contract, or later on as the Work progresses. He shall also indicate whether he owns the machinery or he proposes to purchase or hire the same and shall furnish proof that he shall be able to arrange this machinery whether from his own resources or on hire. The bidder however must own 100% of the minimum equipments listed at Table-II. Within fifteen (15) days after the issue of the Letter of Acceptance, the Contractor shall mobilize of all the machines conforming with the list submitted with his bid. ii) Plant etc., Exclusive Use for the Works All Equipment, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Work and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent, in writing, of the Engineer-in-Charge. iii) Removal of equipment & plant etc. Upon completion of the Works, the Contractor shall remove from the Site all the said equipment and Temporary works remaining thereon and any unused materials provided by the Contractor.
Clause-51	Approval of Materials etc. not implied The operation of Clause-50 hereof shall not be deemed to imply any approval by the

	Engineer-in- Charge of the materials or other matters referred to there-in nor shall it prevent the rejection of any such materials at any time by the Engineer-in-Charge.
MEASUREMENT	
Clause-52	Quantities The quantities set out in the Bill of Quantities are the estimated quantities of the Work, but they are not to be taken as the actual quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.
Clause –53	Works to be measured The Engineer-in-Charge and CGWB representative shall, except as otherwise stated, ascertain and determine by measurement the value in terms of the Contract of work done in accordance with the Contract. He shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor's authorised agent or representative, who shall forthwith attend or send a qualified agent to assist the Engineer-in-Charge in making such measurement, and shall furnish all particulars required by either of them. Should the Contractor not attend, or neglect or omit to send such agent, then the measurement made by the Engineer-in-Charge or approved by him shall be taken to be the correct measurement of the work. For the purpose of measuring such permanent work as it to be measured by records and drawings. The Engineer-in-Charge's representative shall prepare records and drawings month by month of such work and the Contractor, as and when called upon to do so in writing, shall, within fourteen days, attend to examine and agree such records and drawings with the Engineer-in-Charge's Representative and shall sign the same when so agreed. If the Contractor does not so attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the contractor does not agree with the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor shall, within five (5) days of such examination, lodge with the Engineer-in-Charge's representative for decision by the Engineer-in-Charge, notice in writing of the respects in which such records and drawings are claimed by him to be incorrect.
Clause- 54	Method of Measurement The Works shall be measured net, notwithstanding any general or local custom, except where otherwise specifically described or prescribed in the Contract. The contractor shall be made necessary arrangements for verification of work executed.
Clause-55	Key Personnel a. The contractor shall employ the key personnel named in the Schedule of Key Personnel and provide all necessary superintendence during execution of the work and as long thereafter as may be necessary for proper fulfilling of the obligations under the contract. The contractor shall immediately after receiving letter of award of the tender, intimate in writing to the Engineer the name, qualifications, experience, age, address and other particulars along with certificates, of the Site Manager to be the In-charge of the work. The Engineer shall within 15 days of receipt of such communication intimate in writing his approval or otherwise of site manager of the Contractor. Any such approval may at any time be withdrawn and in case of such withdrawal the contractor shall appoint another such Site Manager according to the provisions of this Clause. b. Decision of the Engineer shall be final and binding on the contractor in this

	respect. Such site manager shall be appointed by the contractor soon after receipt of the approval from Engineer and shall be available at site at start of work. The Site Manager shall on receiving reasonable notice from the Engineer present himself to the Engineer and / or at the site of work, as required, to take instructions. c. In case the Site Manager of the contractor does not discharge his duties satisfactorily, the Engineer shall have full powers to suspend the work and contractor shall be held responsible for the delay so caused to the work. d. The contractor shall provide and employ on the site only such technical persons as are skilled and experienced in their respective fields and such supervisory staff as are competent to give proper supervision. The contractor shall provide and employ semi-skilled/unskilled labour as is necessary for proper and timely execution of the work.
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CERTIFICATES AND PAYMENTS

Clause-56	CERTIFICATES AND PAYMENTS A. Payment Certificate: 1) The Contractor shall submit an application for payment, in duplicate, to the Engineer-in-Charge at the end of each month in Proforma approved by Engineer-in Charge. The application shall include the following items, as applicable, which shall be taken into account in the sequence listed: a) The estimated Contract value of the permanent works executed upto the end of the month in question, obtained by applying the base unit rates and prices in the Bill of Quantities to the quantities measured by the Engineer-in-Charge or his representative. b) The contract value of the permanent works obtained as in (a) above, executed upto the end of previous months. c) the estimated contract value at the base unit rates and prices, of the permanent works for the month in question obtained by deducting (b) from (a). d) Any amount to be deducted on account of the repayment of Advance under the provisions set forth in sub-clause (iv) of this Clause ; and e) Any other sum to which the contractor may be entitled under the Contract. f) The Associate/Sub-consultant/Sub-Contractor acknowledges that under the present Contract/Agreement/Work Order/Arrangement, WAPCOS is only working as intermediary between Central Ground Water Board being Principal Employer/Client and Associate/Sub-consultant/Sub-Contractor. Thus, the Associate/Sub-consultant/Sub-Contractor unconditionally acknowledges that the payments under the present Contract/Agreement/Work Order/Arrangement shall be made proportionately by WAPCOS only on back to back basis i.e. within 45 working days subject to receipt of payment from Central Ground Water Board being Principal Employer/Client. The Associate/Sub-consultant/Sub-Contractor also unconditionally agree that in the event the payment or part thereof, under the present Contract/Agreement/ Work Order/Arrangement is not received from Central Ground Water Board (Principal
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Employer/Client), then WAPCOS &/or any of its Employee/Officer shall not be responsible to pay any amount to Associate/Sub consultant/Sub-Contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.

- 2) On receipt of the said applications for payment, it shall be approved or amended such that, in the Engineer-in-Charge opinion, the certificate reflects the amount due to the Contractor in accordance with the Contract.
- 3) No Payment Certificate shall be issued for a sum less than 10% (ten percent) of the Contract Price.

B. Payment Period

Payment to the Contractor of the amount due to under each of the Payment Certificate shall be made by WAPCOS subject to receipt of payment from CGWB. The payment shall be made to contractor on back to back basis (i.e. within 45 working days subject to receipt of payment from Central Ground Water Board being Principal Employer/Client) after receipt of payment from client, depending upon the physical progress of the work.

Payment shall be made in Indian Rupees in the following manner:

Any payment shall be released on back to back basis after receipt of payment from CGWB. The Supplier shall be paid 40% (as per clause **Disbursement of Payment**) of the Contract Price excluding cost of Item Sr. no. 12 and excluding GST as per Price and Completion Schedule- Related Services, and the balance 60% (as per clause **Disbursement of Payment**) of the Contract Price excluding cost of Item Sr. no. 12 and excluding GST as per Price and Completion Schedule- Related Services, for O&M and data communication over the next five years @ 12% per year which include 5 year period of onsite warranty as mentioned below:

Disbursement of Payment shall be as under:-

- i) 40% of the Contract Price excluding cost for item Sr. No. 12 and excluding GST Price and Completion Schedule - Related Services shall be paid as per follows;
 - 20% of Contract price excluding cost of Item Sr. no. 12 and excluding GST, against Supply of Goods shall be released on pro-rata basis within 45 days (after receipt of payment from CGWB) of the successful Delivery and installation of all the instruments/Equipment as per Schedule of Requirements and its final acceptance.
 - 20% of Contract Price excluding cost of Item Sr. no. 12 and excluding GST will be paid on pro-rata basis within 45 days (after receipt of payment from CGWB) of testing, commissioning and final acceptance.
 - Payment against item under Sr. no. 12 of price and Completion Schedule - Related Services, O&M charged in invoice excluding GST, shall be released on pro-rata basis subject to satisfactory completion as per technical specification.

- ii) 60% of the Contract Price excluding cost for item Sr. No. 12 and excluding GST Price and Completion Schedule - Related Services but including replacement of parts if any and seamless data communication, here onwards referred as maintenance charges over the balance 05 (five) years (5 years of warranty period cum comprehensive operation and maintenance (O&M) for a period of continuous real time data generation from the date of commissioning of the respective DWLRs) shall be paid as per follows;
 - 12% per year to be paid on half yearly basis (6% at every six month) inclusive of GST payable on Supply of related services. The Conditions (applicable for this payment) shall be governed by Table IV: PAYMENT FOR DATA RECEPTION Service Level Conditions.
 - Payment against item under Sr. no. 12 of price and Completion Schedule - Related Services, O&M charged in invoice excluding GST, shall be released on pro-rata basis subject to satisfactory completion as per technical specification.

C. Advances:

Mobilization advance not exceeding 10% of the tendered value may be given, if requested by contractor in writing. Such advance shall be in two instalments of 05% each. The first instalment of such advance shall be released to the contractor on a request made by contractor to Engineer-In-Charge. The second instalment shall be released only after the contractor furnishes a proof of satisfactory utilization of the earlier instalment.

Advance for execution of the works, if required by the Contractor, will be granted in the following cases provided that the advances given or taken for particular work are spent only for that work.

I. Advance for Mobilization;

- a) Advance to the extent of 10% (Ten percent) in two installments of 05% each of the Contract Price can be granted for the following preliminary:
 - i) Construction of site camps, stores and workshops etc. including camps labor sheds and stores etc.
 - ii) Mobilization of Men & Machinery.
 - iii) Transportation of Contractor's equipment (in good working condition) to the site including procurement of spare parts.
- b) The release of this advance shall be regulated and governed by the following conditions:
 - i) The advance shall bear simple interest @10% per annum and shall be calculated from date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance.
 - ii) The advance will be disbursed on production of irrevocable bank guarantee amount equal to 110% of amount of advance and valid for the period till recovery of advance, on the Proforma at **Annex-V** from the any schedule Indian bank payable at Gurugram. This bank guarantee shall be kept renewed from time to time to cover the balance amount.
 - iii) Recovery of advance shall be made by the deduction from the

contractors bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty per cent of the gross value of the contract is executed and paid together with interest due on the entire outstanding amount up to the date of recovery of installment.

- iv) Any interest or other earnings accrued on the amounts lying shall be treated as interest/earnings on Government money and shall not be retained by the Contractor. The Contractor shall, at such intervals and in such manner as may be directed by WAPCOS, remit the entire interest/earnings to the Government of India account, in accordance with Rule 230(8) of GFR 2017 and related instructions issued by the Ministry of Finance/CGA from time to time.

D. Payment on Account:

Balance Payment shall be released after measurement and acceptance of work executed.

i) Final Account:

- a) The final bill shall be submitted within one month of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-charge whichever is later.
- b) The contractor shall make no further claims after submission of the final bill and these shall be deemed to have been waived and extinguished.
- c) Payments of those items of the bill in respect of which there is no dispute, for quantities and rates as approved by Engineer-in-charge, will, as far as possible be made within the period of sixty days, the period being reckoned from the date of receipt of the bill by the Engineer-in-charge complete with account of materials issued by the Employer and dismantled materials.

ii) Retention Money/Security Deposit

Deduction towards Retention Money/Security Deposit @ 05% (Five Percent) of each bill (running/final) shall be made. This Retention Money/Security Deposit shall be refunded after completion of maintenance period/defect liability period.

iii) Income Tax;

Deduction towards income tax shall be made from every payment certified by Engineer-in-Charge in terms of Income Tax rules as in force from time to time as per Government of India.

iv) Deduction towards TCS on GST

Deduction towards GST (TDS) shall be made from every payment certified/final bill by Engineer-in-Charge in terms of GST rules as in force from time to time as per Government of India. GST will be reimbursed after submission of documentary proof.

Contractor shall submit the following documents with the proposals for reimbursement of GST:

- a) A copy of GSTR-I;
- b) A copy of GSTR-3B; and
- c) CA certificate indicating details of invoices against which the payment under GSTR-3B has been made.

E. If a request received from the different Ministry/ Department for withholding some payment of a contractor out of the payment due to it against a contract, such request shall be examined on the merits of case for further action.

F. Separate Bank Account for WAPCOS

- a) The Contractor shall, within 15 (fifteen) days of issue of Letter of Acceptance, open a separate bank account with a Scheduled Commercial Bank exclusively for all advances and subsequent payments released by WAPCOS under this Contract. All such advances/payments shall be credited only to this dedicated account and shall be utilized solely for the purposes of execution of the works under this Contract.
- b) The Contractor shall not mix any other receipts or funds in this account, except those received from WAPCOS in connection with this Contract, and shall maintain proper records/statements of receipts and utilization from this account, to be produced to WAPCOS or any audit authority as and when required.
- c) Any interest or other earnings accrued on the amounts lying in the said separate bank account shall be treated as interest/earnings on Government money and shall not be retained by the Contractor. The Contractor shall, at such intervals and in such manner as may be directed by WAPCOS, remit the entire interest/earnings to the Government of India account, in accordance with Rule 230(8) of GFR 2017 and related instructions issued by the Ministry of Finance/CGA from time to time.
- d) The Contractor shall furnish to WAPCOS, along with each Running Account Payment Bill, a bank statement of the said separate account for the relevant period, showing:
 - Opening balance
 - Receipts from WAPCOS
 - Utilization for the works
 - Interest/earnings credited
 - Remittances made to Government account in respect of such interest/earnings.
- e) Non-compliance with the above conditions, mis-utilization of funds from the separate account, or failure to remit interest/earnings to Government account shall be treated as a material breach of contract and shall, without prejudice to any other rights of WAPCOS, entitle WAPCOS to:
 - withhold further payments,
 - recover the amount of interest/earnings due, together with any applicable charges, from monies due or becoming due to the Contractor, and/or
 - Invoke performance security and take any other action permissible under the Contract, GFR 2017 and the Manual for Procurement of Works.

This clause shall be read in conjunction with the provisions relating to advances, payments and recoveries in the General Conditions of Contract, Special Conditions of Contract, and with Government of India financial rules, including GFR 2017 and the

	Manual for Procurement of Works, as amended from time to time.
Clause-57	Approval only by Maintenance Certificate No certificate other than the Maintenance Certificate referred to in Clause-58 hereof shall be deemed to constitute approval of the works.
Clause-58	Maintenance Certificate i) The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer-in-Charge stating that the Works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer-in-Charge within 28 (twenty eight) days after the expiration of the Period of Contract, or, if different periods of maintenance shall become applicable to different sections or parts of the Works, the expiration of the latest such period, or as soon thereafter as any works ordered during such period, pursuant to Clause-46 and 47 hereof, shall have been completed to the satisfaction of the Engineer-in-Charge and full effect shall be given to this Clause, notwithstanding any previous entry on the Works or the taking possession, working or using thereof or any part thereof by WAPCOS. Provided always that the issue of the Maintenance Certificate shall not be a condition precedent to payment to the Contractor of the retention money in accordance with the conditions set out in Clause-59 hereof. ii) Cessation or WAPCOS's Liability' WAPCOS shall not be liable to the Contractor for any matter or thing arising out of or in connection with Contract or execution of the Works unless the Contractor shall have made a claim in writing in respect thereof before the giving of the Maintenance Certificate under this Clause. iii) Unfulfilled Obligations Notwithstanding the issue of Maintenance Certificate, the Contractor and, subject to sub Clause (ii) of this Clause, WAPCOS shall remain liable for the fulfillment of any obligation incurred under the provisions of the Contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such Certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties hereto.
REMEDIES AND POWERS	
Clause –59	Remedies and Powers i) Default of Contractor If the Contractor shall become bankrupt, or have a receiving order made against him, or shall present his petition in bankruptcy, or shall make an arrangement with or assignment in favor of his creditors, or shall agree to carry out the Contract under a committee of inspection of his creditors or, being a corporation, shall go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or if the Contractor shall assign the Contract, without the consent in writing of WAPCOS first obtained, or shall have an execution levied on his goods, or if the Engineer-in-Charge shall certify in writing that, in his

	opinion, the Contractor; a) has abandoned the Contract, or b) without reasonable excuse has failed to commence the Works or has suspended the progress of the Works for fifteen days after receiving, from the Engineer-in-Charge, written notice to proceed or c) has failed to remove materials from the site or to pull down and replace work for twenty eight days after receiving from the Engineer-in-Charge's written notice that the said materials or work had been condemned and rejected by the Engineer-in-Charge under these conditions, or d) despite previous warnings by the Engineer-in-Charge in writing, is not executing the Works in accordance with the Contract, or is persistently or flagrantly neglecting to carry out his obligations under the Contract, or e) has, to the detriment of good workmanship, or in defiance of the Engineer-in-Charge's instruction to the contrary, sub-let any part of the Contract; then the Engineer-in-Charge may, after giving seven days' notice in writing to the Contractor, enter upon the Site Works and expel the Contractor, from the entire Works or part thereof, without thereby avoiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and powers conferred on WAPCOS or the Engineer-in-Charge by the Contract, and may itself complete the entire Work or part thereof as the case may be or may employ any other Contractor to complete the Works. WAPCOS or such other Contractor may use for such completion so much of the Constructional Plant, Temporary works and materials, which have been deemed to be reserved exclusively for the execution of the works, under the provisions of the Contract, as he or they may think proper, and WAPCOS may, at any time, sell any of the said Equipment, Temporary works and unused materials and apply the proceeds of sales in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract. ii) Valuation at Date of Forfeiture The Engineer-in-Charge shall, as soon as may be practicable after any such entry and expulsion by WAPCOS, fix and determine ex-party, or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute, and shall certify what amount, if any, had at the time of such entry and expulsion been reasonably earned by or would reasonably accrue to the Contractor in respect of work actually done by him under the Contract and the value of any of the said unused or partially used materials, any Equipment and any Temporary Works. iii) Payment after Forfeiture If WAPCOS shall enter and expel the Contractor under this Clause, it shall not be liable to pay to the Contractor any money on account of the Contract until the
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	expiration of the Period of Maintenance and thereafter until the costs of execution and maintenance, damages for delay in completion, if any, and all other expenses incurred by WAPCOS have been ascertained and the amount thereof certified by the Engineer-in-Charge. The Contractor shall then be entitled to receive only such sum or sums, if any, as the Engineer-in-Charge may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to WAPCOS the amount of such excess and it shall be deemed a debt due by the Contractor to WAPCOS and shall be recoverable accordingly. In the event of the above course being adopted by the Engineer-in-Charge, the Contractor shall have no claim to compensation for any loss sustained by him by reason of having purchased or procured any equipment, material or entered into an agreements or made any advances on account or with a view to the execution of the Works or the performance of the Contract.
Clause –60	Urgent Repairs If, by reasons of any accident, or failure, or other event occurring to in or in connection with the Works or any part thereof, either during the execution of the Works or during the Period of Maintenance, any remedial or other work or repair shall, in the opinion of the Engineer-in-Charge or the Engineer-in-Charge's Representative, be urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such Work or repair, WAPCOS may employ and pay other persons to carry out such work or repair as the Engineer-in-Charge or the Engineer-in-Charge's Representative may consider necessary. If the work or repair so done by WAPCOS is work which, in the opinion of the Engineer-in-Charge, the Contractor was liable to do at his own expense under the Contract, all expenses properly incurred by WAPCOS in so doing shall be recoverable from the Contractor by WAPCOS, or may be deducted by WAPCOS from any money due or which may become due to the Contractor. Provided always that Engineer-in-Charge or the Engineer-in-Charge's Representative, as the case may be, shall, as soon after the occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.
SPECIAL RISKS/TERMINATION	
Clause-61	Special Risks/Termination of Contract i) Special Risks The special risks are war, hostilities (whether war be declared or not), invasion, act of foreign enemies, the nuclear risks. ii) Termination of the Contract If, during the currency of the Contract any of the Special Risks mentioned herein above which, whether financially or otherwise, materially affects the execution of the Works, the Contractor shall unless and until the Contract is terminated under the provisions of this Clause, continue to use his best endeavors to complete the execution of the Works. Provided always that WAPCOS shall be entitled at any time after occurrence of such Special Risks to terminate the Contract by giving written notice to the Contractor and, upon such notice being given, this Contract shall, except as to the rights of the

	parties under this Clause and to the operation of Clause-66 hereof, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof. iii) Removal of Equipment on Termination If the Contract shall be terminated under the provisions of the last preceding sub-clause, the Contractor shall, with all reasonable dispatch, remove from the Site all equipment and shall give similar facilities to his sub-Contractors to do so. Provided always that against any payments due from WAPCOS under this sub clause, WAPCOS shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of equipment and materials and any other sums which at the date of termination were recoverable by WAPCOS from the Contractor under the terms of the Contract.
FRUSTRATION	
Clause –62	Payment in Event of Frustration If a war, or other circumstances outside the control of both parties, arises after the Contract is made so that either party is prevented from fulfilling its Contractual obligations, or under the law governing the Contract, the parties are released from further performance, then the sum payable by WAPCOS to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause-61 hereof if the Contract had been terminated under the provisions of Clause-61 hereof.
Clause –63	Settlement of Disputes Any dispute, controversy or claims arising out of or relating to this Agreement or the breach, termination or invalidity thereof, shall be settled through following mechanism. - Firstly the aggrieved party shall write a letter to the other party detailing its grievances and calling upon the other party to amicably resolve the dispute by convening a joint meeting. Accordingly, the parties as per their convenience shall jointly convene the said meeting(s), wherein minutes of the said meeting(s) shall be prepared and countersigned by all the parties. It is mandatory to prepare minutes of meetings and to be countersigned by all the parties, irrespective of the outcome of the said meeting(s). - In the event the parties are unable to reach on any settlement in the said meeting(s), the aggrieved party shall mandatory resort to pre-litigation mediation mechanism with Delhi High Court Mediation Cell, New Delhi. - It is only upon failure of the pre litigation mediation mechanism with Delhi High Court Mediation Cell, then the aggrieved party shall mandatory resort to resolution of dispute through arbitration of a sole arbitrator. The appointing authority of sole arbitrator is CMD, WAPCOS Limited, to which neither of the parties have any objection nor they shall ever object. - Subject to parties agreeing otherwise, the Arbitration proceedings shall be conducted in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996.(amended as on date). - It is also acknowledged and accepted that WAPCOS is only working as Intermediary between the Associate/Sub-consultant/Sub-Contractor and the Principal Employer/Client, thus in the event, any dispute arises under the present agreement and referred to Arbitration for adjudication, then subject to

	corresponding clause in the Contract/Agreement/Work Order/Arrangement between Principal Employer/Client & WAPCOS, Principal Employer/Client shall also be made party to the said Arbitration proceedings. Also, the award including costs if any passed against WAPCOS and costs incurred in the proceedings shall be the sole responsibility of Principal Employer/Client. The said clause if found inapplicable, even the other terms of the Arbitration Clause shall survive and shall be acted upon. However, any arbitration cost/courts fee arising out of disputes shall be borne solely by Contractor(s). f). The place/seat of arbitration shall be the place from where the contract has been issued and any award whether interim or final shall be made, and shall be deemed for all purposes between the parties to be made, in the place from where the contract has been issued. The arbitral procedure shall be conducted in English language and any award or awards shall be rendered in English. The procedural law of the arbitration shall be Indian Law. The award of the arbitrator shall be final and conclusive and binding upon the Parties. g). The Contract and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the laws of India and the Parties submit to sole & exclusive jurisdiction of courts at Delhi. However, any arbitration cost/courts fee arising out of disputes shall be borne solely by Contractor(s).
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Clause - 64	Notices i) Service of Notices on Contractor. All certificates, notices or written orders to be given by the Engineer-in-Charge to the Contractor under the terms of the Contract shall be served either by sending by post or delivering the same to the Contractor's office on Site or his principal place of business, or such other address as the Contractor shall nominate for this purpose. ii) Service of Notices on WAPCOS or Engineer-in-Charge All notices to be given to WAPCOS or to the Engineer-in-Charge under the terms of the Contract shall be served by sending by post or delivering the same to the respective addresses given below: a) To Deputy Chief Engineer(WR&WS), WAPCOS Limited 76-C, Institutional Area, Sector-18, Gurgaon, Haryana – 122015 E-mail: gwrddm@wapcos.co.in b) To the Engineer-in-Charge (WAPCOS), at site. iii) Change of Address Either party may change a nominated address to another address by prior written notice to the other party.
DEFAULT OF WAPCOS	
Clause – 65	Default of WAPCOS i) In the event of WAPCOS failing to pay to the Contractor the amount due under any certificate of the Engineer-in-Charge within 45 (forty five) days subject to receipt of payment from Central Ground Water Board, after the same shall have become due under the terms of the Contract, subject to any deduction that WAPCOS is entitled to make under the Contract, the Contractor shall be entitled to issue a notice to the Engineer-in-Charge stating that he shall be terminating his Works after thirty days from the issue of such notice, for the reasons stated therein. However, if within the said period of thirty days, the Engineer-in-Charge notifies the Contractor that the reason stated in the notice of the Contractor are not valid or that the alleged event of default of WAPCOS has been remedied or no longer exists. Then the contractor shall not be entitled to terminate the Contract. ii) If the Contractor becomes entitled to terminate the Contract in terms of sub clause (i) of this Clause, after expiry of the notice of thirty days, he may, notwithstanding hereof, remove from the Site all equipment brought by him.

	iii) In the event of such termination, WAPCOS shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions in Clause 64 hereof, WAPCOS shall pay to the Contractor the amount of any loss or damage to the Contractor arising out of or in connection with or by consequence of such termination.
CHANGES IN COSTS AND LEGISLATION	
Clause – 66	Increase or Decrease of Costs The rate quoted by the Contractor shall remain valid till the actual completion of work, including extensions of period, if any. Any increase or decrease in cost due to change in labour charges/material charges and POL charges from the date of issue of letter of acceptance will not be paid additionally to the Contractor.
Clause-67	Taxation i) The price bid by the contractor shall include all duties, levies, labour cess, taxes seigniorage fee etc. (except GST), that may be levied according to the laws and regulations. ii) The contractor's staff, personnel and labour will be liable to pay personnel income tax in India in the respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the contractor shall perform such duties in regard to such deduction thereof as may be imposed on him by such laws and regulations.
Clause-68	Bribery and Collusion i) WAPCOS shall be entitled to terminate the contract and recover from the contractor the amount of any loss resulting from such termination if the contractor shall have offered or given to any person any consideration of any kind as an inducement or reward for doing, forbearing to do, any action in relation to obtaining, or in the execution of the Contract or any other Contract with WAPCOS, or for showing favour to any person in relation to the Contract or any other Contract with WAPCOS, or if any of the like acts shall have been done by any person employed by the Contractor or acting on his behalf (whether with or without the knowledge of the Contractor), or if the Contractor shall have come to any agreement with another Contractor or number of Contractors whereby an agreed quotation or estimate shall be offered as a bid to WAPCOS by any one or more Contractor(s). ii) In the event of such termination, the Contractor shall: a) Proceed as provided in Clause 61 (iii) hereof: b) Be paid by WAPCOS as provided in clause 61 (iv) hereof, provided that any loss referred to in sub clause (i) of this clause shall first be deducted.
Clause-69	Termination of Contract for WAPCOS's Convenience i) WAPCOS shall be entitled to terminate this Contract at any time for WAPCOS's convenience after giving sixty days prior notice to the Contractor, with a copy to the Engineer-in-Charge. ii) In the event of such termination the Contractor shall: a) Proceed as provided in the sub-clause-61 thereof and; b) be paid by WAPCOS as provided in sub-clause-61 (iv) hereof.
Clause-70	Contractor's near relatives Employed on the Project The Contractor shall intimate WAPCOS before submitting his bid whether any of his

	near relative is posted on the project as Manager/Deputy Manager or as an Officer in any capacity between the grades of Dy. Chief Engineer and Assistant Engineer (both inclusive) in WAPCOS. He shall also intimate the name of persons who are working with him in any capacity or are subsequently by him and who are near relatives to any officer in WAPCOS. Any breach of this condition by the Contractor will render him liable to be removed from the list of Contractors of WAPCOS and his work may be terminated without any compensation whatsoever.
Clause-71	Retired Officers taking up Contract No official employed on Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as/for a Contractor for a period specified by Government of India/State Government, as applicable, of his retirement from service without the previous permission of WAPCOS. This Contract is liable to be cancelled if either the Contractor or any of his employees is found, at any time, to be such a person who had not obtained the permission of WAPCOS as aforesaid, before submission of the bid or engagement in the Contractor's service as the case may be.
Clause-72	Preference to Make in India Successful bidder is to comply with the Public Procurement (Preference of Make in India) order 2020 dated 16.09.2020 as amended up to date, while executing the contract. 1) The provisions of revised 'Public Procurement (Preference to Make in India) Order 2017-Revision' issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry vide Letter No.-P45021/2/2017-PP (BE-II) as amended on 16.09.2020 shall be applicable to the bidding process and award of the contract shall be done accordingly. In this connection, the minimum local content shall be 50% and the margin of purchase preference shall be 20%. 2) Verification of Local Content a) The bidder at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement of the tender. They shall also give details of the location(s) at which the local value addition is made. b) In cases of procurement for a value in excess of Rs 10 Crores, the bidder shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
Clause-73	GUARANTEE 1. Calibration and validation of the installed system shall continue during the entire Warranty period on half yearly basis. 2. The remote stations shall store the data for at least one year. 3. The data would be measured four times a day with an interval of 6 hours and would be transmitted once in a day. 4. Security of the equipment's installed at remote locations shall be responsibility of the bidder during the entire project period (5 years). 5. Supply a detailed operation and maintenance manual for each appropriate

	unit of supplied Goods. 6. Although all accessories and fixtures required for installation of the equipment & their specifications have been specified in technical specifications however, bidder shall ensure the satisfactory performance & functioning of DWLR system complete, for this if any accessory or item s are required that shall be provided by bidder, the cost towards that is deemed to be included in the cost tendered by the bidder, no extra cost shall be paid to the bidder on this account. 7. Also bidder will be responsible to provide protection like canopy etc. to DWLR instrument al all Existing observation bore wells. The cost of Installation, Testing and Commissioning of DWLR station shall to be inclusive these protection measures cost. 8. The typical schematic drawing for installation of Digital Water Level Recorder (DWLRs) is attached for reference. However bidder has to provide the detailed civil work/fabrication drawing for installation arrangement as per the site condition and for which approval of Purchaser is required. 9. The supplier will be responsible for all Civil Works involved in the execution of the contract. Security of installed equipment's including theft and vandalism will be the responsibility of the Bidder during the entire project period (5 years). 10. Ensure that all software licenses and maintenance agreements are in the name of Purchaser and should seek full support and updates for such software for the duration of the warranty period and Annual Maintenance Services Period. All the software original licenses should be valid for the design life of the system that is 10 years from date of commissioning. 11. Blue tooth Facility for Data Downloading from DWLR station, and Provide Mobile App is in bidder scope. 12. If deemed necessary, the bidders will have to give presentation of the proposed DWLRs including the field demonstration, as per request and location decided by the employer. 13. If Bore Well Dried out, reinstallation is charged free of cost by the bidder. 14. Every 6 months Re-calibration of Instrument done by bidder and report submit to Representative Officer. 15. Recurring and non recurring expenditure (for 5 years) in Bidder Scope. 16. O&M period for 5 years will be start after commissioning of all DWLR instruments. Agency will deploy one Project Engineers 24*7 along with laptop at CGWB office for entire project Period.
	DEFINITIONS
REMOTE SITE	Remote site is the site at remote location where Digital water level recorder (DWLR) systems are installed. The Remote site DWLR generally installed within the Piezometers' headwork, dug wells (open wells), Ground/Surface water level monitoring site or any combination of these sites

DATA CENTRE	Data centre is there specified server where data is expected to be received. In case of GSM & GPRS based telemetry, the data centre is the server installed in state data centre for receiving GSM & GPRS transmission.
INVALID DATA	A data would be considered invalid if a) The value recorded / transmitted is beyond permissible limit for that variable. The valid permissible upper limits and lower limits for each monitoring variable for each site would be provided to bidder by the purchaser. b) If the sensor value recorded / transmitted is absurd values or sudden variation in the value (may be within the specified limits) which is not in-line with the actual physical parameter. (e.g. If the Water level sensor recorded / transmitted value is showing absurd sudden variation of 2mts (beyond the limits of rate of change of sensor value) with respective to the previous measurement interval, then this data is invalid data). c) If the sensor value recorded / transmitted is having frequent / periodic gapes then the data will be considered as invalid data. d) If the sensor value recorded / transmitted is remain constant, even if there is variation in the physical parameters. (e.g. If the Water level recorded / transmitted value is showing constant / fix value even there is variation in the water level, then this data is invalid data) e) If the sensor value recorded / transmitted is not in line with the value of co-located automatic / manual observation of the same sensor parameter.
FAILED DATA TRANSMISSION	For each remote station, each scheduled transmission (for all variables including battery voltage) would consist of one data transmission. A data transmission would be considered failed if any of the following conditions are true a) There is no transmission of data from remote site b) Data is transmitted from remote site but not received at state data centre/ e SWIS. c) Data is recorded in data logger but not transmitted d) Data is not recorded by data logger e) Battery voltage not transmitted f) Only battery voltage is transmitted without any actual data from sensors g) Data is transmitted but data values are in valid.
FAULTY STATION	A station would be considered faulty if: a) In case of DWLR data received at State Data Centre, if there is ≥ 8 data measurement (≥ 2 transmission cycles /2 days) are failed / invalid data receptions.
FAULTY DATA CENTRE	A Data Centre shall be treated as Faulty if

	a. Vital Hardware Equipment's installed by bidder at State Data Centre are not functioning properly. b. Bidder has failed to pay the communication charges (SIM, internet, GSM/GPRS etc.) & system is not in function due to unpaid communication charges.																		
MAXIMUM RESPONSE TIME FOR REPAIR(MRTR)	a) The MRTR for Remote station would be 7 days b) The MRTR for Data Centre would be 2 days																		
MINIMUM TIME BETWEEN REPAIRS PERSTATION	a) The minimum time between repairs is six months. If a station went faulty for reasons attributed to bidder and availed of MRTR once, it would not be eligible to avail the free repair period within payment period (six months)																		
PAYMENT FOR DATARECEPTION	The payment would be released proportion to data received at the Data Centre. A table below presents the percentage of data reception and corresponding payment. Table-IV <table border="1"> <thead> <tr> <th>Percentage of data received</th><th>Payment to be made to vendor</th></tr> </thead> <tbody> <tr> <td>90-100%</td><td>100% of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>80-89.99 %</td><td>90% of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>70-79.99 %</td><td>80 % of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>60-69.99 %</td><td>70 % of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>50- 59.99%</td><td>60% of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>40- 49.99%</td><td>40%of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>30-39.99%</td><td>25% of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> <tr> <td>Below 30%</td><td>NIL of (6% of contract price to be paid six monthly as per GCC clause no. 56)</td></tr> </tbody> </table>	Percentage of data received	Payment to be made to vendor	90-100%	100% of (6% of contract price to be paid six monthly as per GCC clause no. 56)	80-89.99 %	90% of (6% of contract price to be paid six monthly as per GCC clause no. 56)	70-79.99 %	80 % of (6% of contract price to be paid six monthly as per GCC clause no. 56)	60-69.99 %	70 % of (6% of contract price to be paid six monthly as per GCC clause no. 56)	50- 59.99%	60% of (6% of contract price to be paid six monthly as per GCC clause no. 56)	40- 49.99%	40%of (6% of contract price to be paid six monthly as per GCC clause no. 56)	30-39.99%	25% of (6% of contract price to be paid six monthly as per GCC clause no. 56)	Below 30%	NIL of (6% of contract price to be paid six monthly as per GCC clause no. 56)
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	The calculations for data reception percentage are as below Data reception percentage for each station = $[1 - (\text{No of Failed transmissions} / \text{No of transmissions expected})] * 100$ Data reception percentage for each station is calculated for payment period (six months) Number of transmissions expected is calculated based on transmission cycle. For 6-hourly transmission cycle, if there are 182 days in six months period,																		

The no. of expected transmissions= $182 \text{ (days)} \times 4 \text{ (transmissions per day)}$ for a given station. If a station went faulty during payment period of six months and availed of free time of MRTR (7 days), the 7 days period would be subtracted from no. of expected transmissions. For example, if a station went faulty and payment period is for 182 days, the number of transmissions expected would be calculated as:
Number of transmissions expected= $(182-7) \times 4$; here 7 days time to repair. However, this deduction would be allowed only once in six months period for any given station.
Where n is number of remote stations

In case the percentage of data reception is below 50% continuously for 3 months, the Engineer- in-charge may initiate termination process as per GCC clause no. 69.

Additional Conditions of Contract

CHAPTER- III
ADDITIONAL CONDITIONS OF CONTRACT

CONTENTS

CLAUSE NO.	TITLE OF CLAUSE
1.	Arrangement by Contractor

CHAPTER -III

ADDITIONAL CONDITIONS OF CONTRACT

1. Arrangement by Contractor	1.1 Local authorities may impose some restrictions on timing for execution of work. Bidder should take in account, this aspect while quoting his rates. 1.2 To ensure the safety and security of local farmers/peoples etc., contractor shall take all necessary precautions to avoid untoward incident and shall provide necessary barricading etc. as required at his own cost. 1.3 All equipments, tools, plant and labour, but not limited to the following, required for the successful completion of work shall be arranged by Contractor at his cost: (i) All equipments including field testing equipments and machineries with all accessories. (ii) Any other equipment, tools & plants and accessories required for successful completion of the work. (iii) Diesel operated welding set. (iv) Arrangements for transportation/storage of water for construction/installation works and other works. (v) Arrangements for transportation/storage of equipment & construction material in the mentioned area. (vi) All temporary camp facilities/accommodation for his manpower at site. 1.4 Contractor may quote his rates as per para 1.10.2 of chapter-I. 1.5 The Contractor shall be fully responsible for any failure/collapse of the DWLR work due to any cause. Under such situation where the work has to be abandoned, no payment shall be made and Contractor shall have no claim whatsoever for such failure. 1.6 The contractor shall provide and maintain fully furnished project offices with telephone, internet, and communication facilities, computer/laptop, printer, and photocopier, operator/support staff, electricity and drinking water, inspection vehicle (three (01) Nos. along with driver, fuel, POL etc.), accommodation for WAPCOS's field establishment, arrangement to shift from site to site the WAPCOS field staff with his camp by contractor own transport, photography/videography arrangements for recording project data, any other essential facilities for effective project supervision like project management software (e.g., MS Project or equivalent). However, amenity charges @1% of work cost shall be recovered from the contractors running bills during the execution of the work and retained as security money. The amount shall be released to
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	the contractor upon the successful completion of the project, subject to the contractor having provided satisfactory above services.
1.7	Separate Measurement Books (MBs) and Instruction Books shall be maintained for each Artificial Recharge Structure, and all measurements and instructions pertaining to the respective structure shall be recorded in accordance with the applicable CPWD codal provisions and prescribed procedures.
1.8	Contractor shall submit five hard copies & one digital soft copy of the completion report along with Measurement Books (MB's) giving details of each individual structure constructed under the project.
1.9	Contractor will submit fortnightly progress report in respect of different activities to be carried out within the project.
1.10	The quality control and assurance shall be ensured by the contractor in all respects of complete items of work as may be applicable.
1.11	Contractor shall carry out the requisite services for successful completion and commissioning of the Project.
1.12	The works should be carried out as per CPWD codal provisions.
1.13	The contractor should follow guidelines of honourable Supreme Court of India in order to avoid incident of falling of children in to well/excavated area. Construction site to be fenced properly.
1.14	All testing charges shall be borne by the contractor including transportation charges of samples up to approved laboratory.
1.15	If for execution of any item of work, diversion of water stream is required shall be done by the contractor on his cost, if required.
1.16	Surplus soil obtained from excavation shall be disposed off to the nearest place as per direction of local authorities/Engineer-In-Charge at contractor own cost and nothing shall be paid on this account.
1.17	All test shall be got done from the Govt. approved test laboratory.
1.18	Bidder's quoted rates shall be for complete finished items and should be inclusive of all ancillary works necessary for the completion of work covered under respective item as per specification, for all leads and lifts unless otherwise specified in the description of the item.
1.19	Quoted rate of all items should be inclusive of labour welfare, camping, medical and sanitation facilities to the labour, tools and plants etc. required to complete the work, all taxes (except GST), royalty etc. as per specification.
1.20	OPC/PPC (fly ash based) cement of grade 43 N/mm ² shall be used unless otherwise specified.
1.21	In case of item of embankment, quoted rate should be inclusive of cost of earth, transportation from any lead for up to site, Royalty etc. and no payment for ramp, approaches to embankment shall be made. Cost of such item shall deemed to have been included in the item of embankment. Similarly no payment of construction & maintenance of haul roads for approaches to borrow area shall be

	admissible. 1.22 The rate of earth work for embankment are for complete item and shall include allowances for shrinkage due to compaction, wastage etc. 1.23 The quoted rate for earthwork in excavation should include the cost of dewatering/planking/shoring/timbering/strutting/barricading, if any, required at site. 1.24 The works above apron level shall be considered as superstructure and below apron (top level) as foundation. 1.25 The quoted rate of cement concrete should include required material component, admixture, laying, compaction, vibration, curing and all T&P including vibrators, POL etc. 1.26 The quoted rates should include all construction materials such as earth, clay, stone, steel, cement, and other materials required for execution of the works, including expenses towards procurement, transportation, loading, unloading, stacking, storage, insurance, watch and ward, and other incidental charges connected with the execution of the Project. 1.27 All statutory payments required to be made to Government Departments, Statutory Authorities, and Local Bodies for obtaining mandatory approvals, permissions, clearances, utility connections including water and electricity, and other statutory compliances required for execution of the Project shall be borne by Contractor. 1.28 Contractor shall adhere to the provision of implementation plan, failing which; WAPCOS shall be free to terminate the contract in addition to the imposing of penalty under LD Clause and forfeiture of performance security. An undertaking to this effect on firm's letter head shall be submitted along with bid.
2. Penalty for non-performance	If the service provider has not corrected a Defect within the time specified in the Procuring Entity's notice, a penalty for Lack of performance will be paid by the service provider. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as per Contract Clauses.

Technical Specifications

CHAPTER -IV
TECHNICAL SPECIFICATIONS AND DRAWINGS

TABLE OF CONTENTS

S. No.	TITLE OF CLAUSE
4.1	DWLR Work
	Typical Drawings

CHAPTER –IV

TECHNICAL SPECIFICATION

Supply, Commissioning, Installation and Operation & Maintenance of DWLR

The supplier shall be required to provide all of the following material / services for implementation of Real time ground water level data monitoring System to be installed in the Piezometers at RODC at CGWB, MER, Patna, Bihar. The scope of the work would essentially involve:

1. Complete Supply, Installation and Commissioning of Digital Water Level Recorders (DWLR) and telemetry system in the identified piezometers including arrangements for Protection box of prescribed size, fencing and security arrangements including associated civil works, sensors, data logger, software, hardware and ancillaries' equipment, etc.
2. Technical design, supply, installation, testing, commissioning of the Digital Water Level Recorder (DWLR) for the real time ground water level data collection network and establish data communications using GSM & GPRS telemetry between the remote DWLR stations and at RODC at CGWB, MER, Patna, Bihar through Cloud server maintained by supplier with API interface and later through the e-SWIS/ e- GEMS/NHP Software. This includes, but is not limited to acquiring service, and maintaining all aspects of the service during the warranty period as well as the Comprehensive maintenance period.
3. Testing the data acquisition and data communication system using GSM/GPRS between the cloud server and the data center/central facility at RODC at CGWB, MER, Patna, Bihar. The SIM card shall be supplied by the bidder and the availability of Cloud services shall be the responsibility of the supplier. Data transmission charges would be borne by bidder during O&M period.
4. Establish a GSM & GPRS receiving system along with all required arrangement at Cloud server (maintained by supplier) to collect GSM & GPRS data from DWLR station network. This shall include a High Speed uninterrupted internet connection, Static IP, FTP Server with adequate firewall & antivirus protection that will support the seamless transfer of DWLR data stream. And required all acquiring hardware and software, software licenses, installation, configuration. No data processing software has to be provided by the bidder at state data center.
5. Establish communication between remote DWLR stations with GSM & GPRS receiving system along with all required arrangement at Cloud server to collect GSM & GPRS data from DWLR station network. Bidder shall make necessary arrangement for configuration of Cloud Server with adequate firewall & antivirus protection that will support the seamless transfer of DWLR data from Cloud server to RODC at CGWB, MER, Patna, Bihar through API interface. And required all acquiring hardware and software, software licenses, installation, configuration. Data processing software has to be provided by the bidder at state data centre. GW Data thus obtained should also be available on cloud. Cloud server should be located in India and should be as per GUI guideline. All Data transmission charges during O&M period will be borne by the bidder.
6. Perform on-site assembly, start-up of the supplied goods.
7. Complete commissioning integration, testing & organization of the whole system.
8. Provide operation & maintenance services during five (5) years comprehensive warranty period

which shall include all components at the remote stations as well as all newly acquired equipment's in the data center.

9. Provide installation and maintenance reports as required by the Purchaser and any delay is not acceptable in time schedule provided by supplier.
10. Supply detailed operation and maintenance manual for each component in the system and compile Knowledge and working supply type Manual for training purpose (including multimedia training kits).
11. Provide classroom and field training to the sufficient number of CGWB/WAPCOS personnel on the DWLR data acquisition system. This includes operation and maintenance procedures. Training will also occur at selected field locations as selected by the Purchaser.
12. A guarantee by the manufacturer that all equipment being provided will be supported for a minimum of ten years after the commissioning of the Digital Water Level Recorder (DWLR) system.
13. Calibration and validation of the installed system shall continue during the entire Warranty period on half yearly basis.
14. The remote stations shall store the data for at least one year.
15. The data would be measured four times a day with an interval of 6 hours and would be transmitted once in a day.
16. Security of the equipment's installed at remote locations shall be responsibility of the bidder during the entire project period (5 years).
17. Supply a detailed operation and maintenance manual for each appropriate unit of supplied Goods.
18. Although all accessories and fixtures required for installation of the equipment & their specifications have been specified in technical specifications however, bidder shall ensure the satisfactory performance & functioning of DWLR system complete, for this if any accessory or items are required that shall be provided by bidder, the cost towards that is deemed to be included in the cost tendered by the bidder, no extra cost shall be paid to the bidder on this account.
19. Also bidder will be responsible to provide protection like canopy etc. to DWLR instrument at all Existing observation bore wells. The cost of Installation, Testing and Commissioning of DWLR station shall to be inclusive these protection measures cost.
20. The typical schematic drawing for installation of Digital Water Level Recorder (DWLRs) is attached for reference. However bidder has to provide the detailed civil work/fabrication drawing for installation arrangement as per the site condition and for which approval of Purchaser is required.
21. The supplier will be responsible for all Civil Works involved in the execution of the contract. Security of installed equipment's including theft and vandalism will be the responsibility of the Bidder during the entire project period (5 years).

22. Ensure that all software licenses and maintenance agreements are in the name of Purchaser and should seek full support and updates for such software for the duration of the warranty period and Annual Maintenance Services Period. All the software original licenses should be valid for the design life of the system that is 10 years from date of commissioning.
23. Bluetooth Facility for Data Downloading from DWLR station, and Provide Mobile App is in bidder scope.
24. If deemed necessary, the bidders will have to give presentation of the proposed DWLRs including the field demonstration, as per request and location decided by the employer.
25. If Bore Well Dried out, reinstallation is charged free of cost by the bidder.
26. Every 6 months Re-calibration of Instrument done by bidder and report submit to Representative Officer.
27. Recurring and non recurring expenditure (for 5 years) in Bidder Scope
28. O&M period for 5 years will be start after commissioning of all DWLR instruments.
29. Agency will deploy one Project Engineer 24*7 along with laptop at RODC at CGWB, MER, Patna, Bihar office for entire project Period.
30. CGWB will assist WAPCOS and Contractor to provide constructed well/pre-existing wells in proper favourable conditions for the installation of DWLRs.

Summary of Technical Specifications

The Goods and Related Services shall comply with following Technical Specifications and Standards:

(i) Specifications of the DWLR, Pressure Type (GW) with Telemetry System

Feature	Value
Site Conditions	
Ambient Temperature	From 0 to +60 °C
Humidity	5-100 %
Altitude	0-2500 meter
DWLR Water Level Sensor with Temperature Sensor	
Sensor Type	For Pressure Type-Submersible pressure transducer with Non- Vented Pressure Sensor with Barometric Pressure Correction for Individual Sensor.

Measuring Range	For Pressure Type- up to 30 meters, up to 50 meters & up to 70 meters as per site requirement
Installation Depth	The installation depth will be: For Pressure Type- a) 50 ± 10 meters b) 130 ± 10 meters
Dimension	For Pressure Type- Outer diameter of sensor unit: <80mm, (for sensor)
Material	Titanium or other better corrosion resistant material
Ingress Protection	For Pressure Type-IP 68 for Sensor
Overall Accuracy	For Pressure Type- 0.2%FSO
Resolution	3 mm or better
Reproducibility	0.1% full scale or better
Long Term Stability	For Pressure Type- 0.1% Full scale and should ensure long term stability without any field calibration requirements except barometric compensation
Temperature Measuring Accuracy	For Pressure Type- 0 to 50°C
Temperature Measuring Accuracy	For Pressure Type- Better than $\pm 0.2^\circ\text{C}$
Burst pressure	For Pressure Type- >3 times Full scale.
Overload pressure	For Pressure Type- 2 times full scale or better, without effect on calibration.
Minimum audio power	For Pressure Type- Not Applicable
Over voltage protection on supply & sensor wires	Should include lightening, over-voltage and surge protection.
Output	SDI-12, RS-485, 4-20 mA or compatible with data logger. .

Installation	For Pressure Type- The system should be provided with a suspension bracket , Well enclosure /canopy & junction boxes (if required) allowing secure installation within the Piezometers' headwork, including appropriate cable mounting accessories to allow the sensor to be adjusted to the required depth.
Direct Read Sensor Cable	For Pressure Type- The cable shall have following features:
	• Strength members for good longitudinal stability of cable • The cable and contacts should be fixed or quick connect. • Cable screen to be connected to the data logger ground terminal to minimize electrical interference. • A cable suspension bracket allowing the DWLR to be adjusted to the required depth, in a stable and reproducible manner. • Corrosion and moisture free as the equipment has to work under water condition. • Cable should have good flexibility. • Should be of Polyurethane Jacket or better • The electrical wires shall have sufficient conductivity to allow for extension of the cable to up to 200m without degrading accuracy, stability and data communication.
Data logger	
Atmospheric Pressure correction	For Pressure Type- In case of Non-vented pressure sensor, data logger should be applied Atmospheric Pressure correction automatically.
Data Logger Input	For Pressure Type- Level sensor, Temperature sensor
Resolution of measurement	For Pressure Type- 16-bit ADC with +/- 1 LSB accuracy 1 mm or better
Measuring interval	Should be programmed to store data from 1 minute one reading to 24 hours one reading with future start option.
Settling up Time	For Pressure Type- < 30 minutes after submersion.
Recording capacity	Shall store data of at least 1 year
Memory type	Non-volatile flash memory that can store one year of data (with 15- minute logging interval) and expandable up to minimum 1 GB using USB/SD Card
Power supply	Should be equipped with lithium or alkaline battery pack, giving at least 2 years operation (one transmission per day and four measurements per day). Batteries must be replaceable in the field or in local offices of the Implementing Agency or supplier. Replacement batteries must be easily available in India

Battery Voltage Monitoring	Monitoring and transmission of Battery Voltage level
Built in clock	Accurate to ± 1 minute per year
Displayed Time Resolution	1 second
Over-voltage Protection	Should include lightening, over-voltage and surge protection
Protection	For Pressure Type- IP68 with Impact Resistant for Water level sensor IP65 (for data logger) with Impact Resistant
Port for configuration	One serial /USB port for communication with laptop for programming
Ports for telemetry	Port for communication with GSM & GPRS telemetry
Operating System	Windows software for system configuration / communication
Licenses	All required licenses shall be included
Real time clock	Time synchronization facility shall be provided with IST
Accessories	Serial /USB cable and adaptor if required along with all accessories and fixing units etc.
Communication Interface	
Communication Interface	The logger must be capable of connection to a computer via USB 2.0 or better and supply should include the necessary interface cables.
Computer Interface	The Logger must be capable of connection to a computer via USB 2.0/USB 3.0 and supply should include the necessary interface cables.
File Format	The format of the data downloaded by communication interface shall be in standard CSV format (as specified in technical Specifications) which is compatible with e-SWIS/NHP software.
GSM & GPRS Transmitter	
Transmission System	GSM/GPRS/edge-based data transmission system
Frequency range	900 MHz: 824-960 MHz/1800MHz:3000-1880 MHz 4G and better
Performance	Data Reception availability of 95% or better
Communication Direction	Utilize GPRS network for two-way connection with FTP server TCP/IP (INTERNET) connection and SMS
Transmission trigger	Data collection to be triggered by interrogation from Data Center, or by event-based transmission triggered by remote site when active (Not in power saving mode)
Power Saving	Ability to disable interrogation system in order to save power at remote site

Communication Protocol	Data transmission to execute HTTP Post or FTP or MQTT, SMS to transmit data to the Data Center
Accessories	All associated equipment, including Antenna all cables and mounting hardware
Software for Data Logger	
Operating System	Windows software for system configuration, transfer and analysis of data to computer
Version	English language version
License	All required licenses included
General Features	
Battery	The battery should be easy to replace in field, and easily available in the Indian market
Tools	Complete tool kit for installation and routine maintenance
Manuals	Full documentation and maintenance instructions in English

(ii) Specifications for Data Services

Bidder is to acquire, manage, and operate a data collection, storage, and dissemination to support the following activities during **5 years (or the closure of NHP, whichever is earlier) warranty period** for DWLRs with telemetry system.

Note: A hardware server/storage system for additional backup shall be provided at State Data Center.

S N o.	Parameter	Functionality requirement
1	Data collection performance	Bidder should ensure seamless data and responsible for - Real-time data collection at all DWLR stations & shall ensure seamless data transfer. - Real-time data collection from all data stations. The DWLR should be able to gather water level data for time frequency ranging from 10 seconds to 12 hrs as well as on log mode (time/depth) for specified intervals. Purchaser may request changes in data collection schedule on an as needed basis. - The data from DWLR stations will be transmitted through cloud server to State Data Center (SDC) through API-Interface in pull and push mode. - From SDC to E-SWIS software through internet. This data will be processed and disseminated via E-SWIS cloud. - The processed data from e-SWIS in the form of reports/bulletins will be transmitted to State Data Centre.

2	Data maintenance	All activities pertaining to installation, data services, Operation & maintenance at the remote DWLR station will be maintained by the bidder during the warranty and maintenance period and will include a log of activities during every station visit.
3	Reports & Bulletins Storage system	Storage of all data, reports & bulletins in the proper manner and easy to access. This data will be backed up in such a way that it is not possible to lose data that has already been stored with the use of mirrored or replicated storage.
4	Help desk	Bidder to operate help desk to respond to queries from the purchaser. Help desk will be able to solve any problems related to data collection, processing, and dissemination to the purchaser. Help desk shall be available from 8am to 6pm, Monday –Sat.

(iii) Specifications for Data Transmission System (Telemetry)

1. The transmission system should be tightly integrated with the DWLR system, along with compact remote/field mounted systems consisting of sensor, data logger, modem and antenna
2. The system should be watertight (IP68 for sensor & IP65 for data logger or equivalent or as mentioned in Technical Specifications) and impact resistant.
3. The system should allow easy access into the well for monitoring measurements without removing complete system;
4. System must be power-supplied by standard lithium/alkaline batteries for operation time of at least two years by one set of batteries (one transmission per day, 4 measurements per day) and must be placed in a water resistant (**IP65 or equivalent**) enclosure. The replacement of batteries during five years warranty period would be responsibility of the bidder, at bidder's cost
5. The system must have integrated energy management system using free programmable time slots for measurement and transmission to minimize power consumption;
6. The connectors should be water-tight (**IP68 or equivalent or as mentioned in Technical Specifications**).
7. An alarm notification must be sent by the system via SMS to user defined phone numbers through suitable means of communication for user defined parameters. This includes battery performance (battery voltage).
8. A standard USB /RS-232 communication interface **or as mentioned in Technical Specifications** should be available for set up and configuration and must be easily accessible.
9. Data logger shall be provided with Atmospheric Pressure sensor at individual station, & Atmospheric Pressure correction shall applied automatically on the raw water level reading from non-vented water level sensor. The details of correction procedure shall be fully documented in user manual. Provision shall be made to view and store the raw and compensated water level data along with atmospheric pressure and Water Temperature data in data logger memory (Applicable for Pressure Type DWLRs)
10. All measurement and set up options, data download and programming of data logger shall also

be done by online session similar to all functions at site by direct connection to a PC

11. Data download / retrieval from remote DWLR station to central server PC via GSM/GPRS network shall be provided. The data from remote station should be in standard CSV format (as specified in technical Specifications) which is compatible with e-SWIS software
12. The software should be provided to allow download of data from the DWLR data logger on to a Laptop/hand held devices in the field. The downloaded data shall be in standard CSV format (as specified in technical specifications) which is compatible with e-SWIS/NHP software.

(iv) Fencing with wire mesh (76mm x 76mm x 12 gauge) shall be provided around each piezometer site as per the drawing and specifications provided.

(v) Transmission of Data format to e-SWIS /NHP software:

The format for GSM & GPRS communication is as specified below

Table below gives the GSM / GPRS data parameters and their identification code format which is required to transmit the data from data logger to FTP server.

FORMAT:

&Station ID, Date and Time, Mobile Number, Battery, Water Temp, Corrected Water Level

Above data string will be ended with New-Line character and a separate data string will be for each measurement cycle.

(a) Example Data Spring:

&738D1E76,07/01/19 00:00,9843556430,13.5,22.3,26.347,456

&738D1E76,07/01/19 06:00,9843556430,13.5,24.5,26.347,456

&738D1E76,07/01/19 12:00,9843556430,13.5,26.8,26.347,456

&738D1E76,07/01/19 18:00,9843556430,13.5,24.3,26.347,456

Sl.No.	Channel no.	Parameter
1.	Station ID	Start of String should be '&' and Eight Characters Station ID provider by bidder
2.	Date and Time	Measurement date and Time in DD/MM/YY HH:MM in IST of the measurement cycle
3.	Mobile Number	Mobile no (10 digit) of remote station SIM
4.	Battery	Battery voltage in Volts with 1 right digit at measurement date and time
5.	Water Temp	Water Temperature in °C with 1 right digit at Measurement date and time
6.	Corrected Water Level	Water level after atmospheric pressure compensation in Mts. with 3 right digit at measurement date and time

7	Electrical Conductivity	Electrical Conductivity mS/cm with 3 right digit at measurement date and time
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Note:

- If any sensor is not connected then it should transmit '--' characters in place of the sensor value.
- Attached format is indicative, recommended for standardised data acquisition for development of unified Water Information System.

TRAINING AND DOCUMENTATION

1. The Bidder is required to provide an extensive training programme for the system. The training set forth in the following paragraphs is a minimum requirement and the bidder should
2. Propose any additional training that he considers critical for long term success of the system operations.
3. The Bidder is expected to provide an outline or table indicating the contents of each of the required courses. The table shall describe the specific topics to be covered for each day of the training period.
4. The Bidder is responsible for the salaries of the training instructors and all training materials. The costs of travel, transportation and per diem for the trainees shall be borne by the Purchaser.
5. Training shall be provided by the bidder in several phases. The training shall include both classroom and field trainings and will be continued during all five years. The bidder is required to have DWLR equipment specialists.
6. The Bidder shall provide mandatory trainings as training modules as part of the Tender given as under:

S. No.	Description	Numbers of training	Number of Participants per session
1	User Training Course for senior management. (one day)	3 (1 before/during commissioning and 2 during warranty)	5
2	Operation and Maintenance course (3 days). Course topics will include sensor calibration, data logger configuration, data downloading, data retrieval, collection, compilation, processing, maintenance requirements, and procedures for equipment configuration, installation, site testing and commissioning.	5 (2 before /during commissioning and 3 during warranty)	10

7. All aspects of the electrical, instrumentation and telemetry equipment being supplied shall be covered in the courses and full documentation shall be provided. The documentation and kits shall be got approved from Purchaser in advance. The course shall provide detail documentation and shall

ensure that the Purchaser's personnel shall be able to modify settings/ parameters without reference back to the Supplier. The places / sites where this training will be decided later by the Purchaser.

8. The training course will take place as decided by the Purchaser. In case of formal training, the Purchaser will provide classroom and other logistics. The Bidder will facilitate the professional and the training material. On-the-job training will be provided by the Bidder in conjunction with the installation of hydro-meteorological stations and during the course of maintenance as required.
9. Training kit containing course material in soft as well as hard copy shall be provided by the Bidder.

PREVENTIVE MAINTENANCE

The bidder shall be responsible for operation and maintenance of all stations /components of installations, commissioning, site acceptance and operation tests. All equipment maintenance cost, repairs, replacements and repairs to civil work shall be borne by the bidder during the warranty Period. The scope of O&M support would include all materials and services including major replacement of components, mandatory spare parts required to ensure smooth and sustainable operations of the entire system. The bidder shall provide monthly maintenance reports during the course of maintenance.

The bidder shall supply a Manual specifying all the faults experienced by the system together with an account of how such faults have been rectified. Bidder shall provide the list of mandatory spare parts & shall ensure the availability of sufficient mandatory spare parts in its go down for fulfilling its service obligations during warranty period. The same can be inspected by Engineer-in Charge or its authorized representative.

The bidders shall ensure the following visits at remote site for preventive maintenance. The bidder should take time stamped geo tagged photographs of the equipment during each maintenance visit (either scheduled or unscheduled visit). The photographs should show the condition of equipment before maintenance, during maintenance and after maintenance.

SCHEDULE SHOWING FREQUENCY OF SCHEDULED VISITS FOR ROUTINE AND PREVENTIVE MAINTENANCE

Sl. No.	Station Category	Minimum Annual Preventive Visits	Remarks
1	DWLR stations	2	Every Half year and also on need basis

Operation & Maintenance (O&M)

1. Bidder shall responsible for Operation of DWLR system and ensure seamless data transfer from remote stations to Cloud through GSM/GPRS network & from Cloud server to E-SWIS software through API interface. And also the processed data from e-SWIS in the form of reports/bulletins will be transmitted to State Data Centre which should be stored proper manner and easy to access.

2. Operation and Maintenance shall include free of cost repairs/ replacement of hardware and Software necessary to keep the system functional for the period of five years from Date of Installation.

TECHNICAL RESPONSIVENESS FORM

Bidder shall furnish clause by clause commentary against the laid down technical specification and standards as per the format given below:

(A) Summary of Instructions

1. Particulars of Manufacturer and local agent cum representative are to be given under rows Model and Address.
2. **All entry boxes in column “Specification and Standards as offered in by Bidder” shall be filled in accurately and comprehensively. Quantitative fields shall be filled in accurately. It is not acceptable to use ‘Yes’, No, Compliant or similar evading words. Following format is designed to help the Bidder to understand the requirements of the equipment being procured. The Bidder must describe in the format how his bid responds to the technical requirements of the equipment. Bidder to note that one or two-word responses (e.g. “Yes”, “No” “will comply” or similar evading words) are normally not sufficient to confirm the responsiveness with the technical requirements, hence elaborate responses are sought from the bidders. In case deviation on the following technical requirements of equipment is not as per the minimum criteria mentioned, the bids may be declared “non-responsive”**
3. Requested materials and information shall be enclosed with the bid and be unambiguously associated with instruments as offered in the bid
4. Negligence to comply with the instructions and requirements as stated above makes the bid liable to be rejected.
5. Abbreviations: OD-Outer Diameter; ID-Inner Diameter; FS-Full Scale; Pa-Pascal (unit of pressure), DWLR-Digital Water Level Recorder; DRS-Data Retrieval System; HHT-Hand Held Terminal. DCP- Data collection Platform, AWS- Automatic Weather Station, ARG- Automatic Rain Gauge, AWLR- Automatic Water Level Recorder
6. Sample interval is the interval at which samples or sensor readings are taken. The recording /measurement interval defines the interval at which the data records are stored in memory. A data record can represent a single sample or the average of a number of samples. In particular the result of the wave suppression filter is a single record representing the average value of a number of samples.

(B) Entries requiring special attention:

1. The longitudinal properties of the suspension cable affect the accuracy directly. Bidder to specify all factors affecting the longitudinal properties of the suspension cable: e.g. length creeps due to sensor and cable weight (submerged) longitudinal temperature coefficient, uncoiling after installation, expansion/contraction of jack due to temperature and aging, etc.

(C) Bidder shall provide information in the formats given below:

1. Make/ Model/ Local Agent etc.:

Bidder	DWLR make/ model	Water level sensor make/ model		Local Agent
Name / Complete Address/Website/ Email	Model: Manufacturer: Name: Place: Tel: Fax: E-mail: Web:	Model: Manufacturer: Name: Place: Tel: Fax: E-mail: Web:		Name: Address: Tel: Fax: E-mail: Web:

2. Clause by Clause Commentary against laid down technical specifications: Specifications of the DWLR, Pressure Type with telemetry system.

Bidders shall furnish clause by clause commentary against the laid down technical specification and standards as per the format given below:

Name of Goods- its Features	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
DWLR water Level sensor (Non-Vented, Submersible Pressure sensor with Temperature sensor) (Bidder should clearly specify the type of offered DWLR system)			
Make :			
Model:			
Type:- DWLR			
Manufacturer Name, address, email, phone, website.			
Site Conditions			

Ambient Temperature	From 0 to 60 degree		
Humidity	5-100 %		
Altitude	0-2500 meter		
Name of Goods-its Features	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
Sensor Type	Submersible pressure transducer with Non-Vented Pressure Sensor with Barometric Pressure Correction for Individual Sensor		
Measuring Range	For Pressure Type- up to 30 meters, up to 50 & up to 70 meters as per site requirement		
Installation Depth	The installation depth will be: For Pressure Type- a) 50 ± 10 meters b) 130 ± 10 meters		
Dimension	For Pressure Type- Outer diameter of sensor unit: <80mm, (for sensor)		
Material	Titanium or other better corrosion resistant material		
Ingress Protection	For Pressure Type-IP 68 for Sensor		
Overall Accuracy	For Pressure Type- 0.2%FSO		
Resolution	3 mm or better		
Reproducibility	0.1% full scale or better		
Long Term Stability	For Pressure Type- 0.1% Full scale and should ensure long term stability without any field calibration requirements except barometric compensation		
Temperature Measuring Accuracy	For Pressure Type- 0 to 50°C		

Temperature Measuring Accuracy	For Pressure Type- Better than $\pm 0.2^{\circ}\text{C}$		
Burst pressure	For Pressure Type- >3 times Full scale.		
Overload pressure	For Pressure Type- 2 times full scale or better, without effect on calibration.		
Minimum audio power	For Pressure Type- Not Applicable		
Over voltage protection on supply & sensor wires	Should include lightening, over-voltage and surge protection.		
Output	SDI-12, RS-485, 4-20 mA or compatible with data logger. .		
Installation	For Pressure Type- The system should be provided with a suspension bracket , Well enclosure /canopy & junction boxes (if required) allowing secure installation within the Piezometers' headwork, including appropriate cable mounting accessories to allow the sensor to be adjusted to the required depth.		
Direct Read Sensor Cable	For Pressure Type- The cable shall have following features: Strength members for good longitudinal stability of cable		
Name of Goods-its Features	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks

	• The cable and contacts should be fixed or quick connect. • Cable screen to be connected to the data logger ground terminal to minimize electrical interference. • A cable suspension bracket allowing the DWLR to be adjusted to the required depth, in a stable and reproducible manner. • Corrosion and moisture free as the equipment has to work under water condition. • Cable should have good flexibility. • Should be of Polyurethane Jacket or better • The electrical wires shall have sufficient conductivity to allow for extension of the cable to up to 200m without degrading accuracy, stability and data communication.		
Data logger			
Make			
Model			
Manufacturer ,Name, address, email, phone, website, fax			
Atmospheric Pressure correction	For Pressure Type- In case of Non-vented pressure sensor, data logger should be applied Atmospheric Pressure correction automatically		

Name of Goods-its Features	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
Data Logger Input	For Pressure Type- Level sensor, Temperature sensor		
Resolution of measurement	For Pressure Type- 16-bit ADC with +/- 1 LSB accuracy 1 mm or better		
Measuring interval	Should be programmed to store data from 1 minute one reading to 24 hours one reading with future start option.		
Settling up Time	For Pressure Type- < 30 minutes after submersion.		
Recording capacity	Shall store data of at least 1 year		
Recording Capacity	Shall store data of at least 1 year		
Memory type	Non-volatile flash memory that can store one year of data (with 15-minute logging interval) and expandable up to minimum 1 GB using USB/SD Card		
Power supply	Should be equipped with lithium or alkaline battery pack, giving at least 2 years operation (one transmission per day and four measurements per day). Batteries must be replaceable in the field or in local offices of the Implementing Agency or supplier. Replacement batteries must be easily available in India		
Battery Voltage Monitoring	Monitoring and transmission of Battery Voltage level		
Built in clock	Accurate to ± 1 minute per year		
Displayed Time Resolution	1 second		
Over-voltage Protection	Should include lightening, over-voltage and surge protection		
Protection	For Pressure Type- IP68 with Impact Resistant for Water level sensor		

Name of Goods-its Features	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
	IP65 (for data logger) with Impact Resistant		
Port for configuration	One serial /USB port for communication with laptop for programming		
Ports for telemetry	Port for communication with GSM & GPRS telemetry		
Operating System	Windows software for system configuration / communication		
Licenses	All required licenses shall be included		
Real time clock	Time synchronization facility shall be provided with IST		
Accessories	Serial /USB cable and adaptor if required along with all accessories and fixing units etc.		
Communication Interface			
Communication Interface	The logger must be capable of connection to a computer via USB 2.0 or better and supply should include the necessary interface cables.		
Computer Interface	The Logger must be capable of connection to a computer via USB 2.0/USB 3.0 and supply should include the necessary interface cables.		
File Format	The format of the data downloaded by communication interface shall be in standard CSV format (as specified in technical Specifications) which is compatible with e-SWIS software.		
GSM & GPRS Transmitter			
Make			
Model:			
Manufacturer, Name, address, email, phone, website, fax			
Transmission System	GSM/GPRS/edge-based data transmission system		
Frequency range	900 MHz: 824-960 MHz/1800MHz:3000-1880 MHz 4G and better		

Name of Goods-its Features	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
Performance	Data Reception availability of 95% or better		
Communication Direction	Utilize GPRS network for two-way connection with FTP server TCP/IP (INTERNET) connection and SMS		
Transmission trigger	Data collection to be triggered by interrogation from Data Center, or by event-based transmission triggered by remote site when active (not in power saving mode)		
Power Saving	Ability to disable interrogation system in order to save power at remote site		
Communication Protocol	Data transmission to execute HTTP Post or MQTT or FTP,SMS to transmit data to the Data Center		
Accessories	All associated equipment, including Antenna all cables and mounting hardware		
Software for Data Logger			
Operating System	Windows software for system configuration, transfer and analysis of data to computer		
Version	English language version		
License	All required licenses included		
General Features			
Battery	The battery should be easy to replace in field, and easily available in the Indian market		
Tools	Complete tool kit for installation and routine maintenance		
Manuals	Full documentation and maintenance instructions in English		
Specifications of Data Acquisition Software(DAS)			
Sl	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
1	Data collection performance :		

	Bidder should ensure seamless data and responsible for - Real-time data collection at all DWLR stations& shall ensure seamless data transfer. - Real-time data collection from all data stations. The DWLR should be able to gather water level data for time frequency ranging from 10 seconds to 12 hrs as well as on log mode (time/depth) for specified intervals. Purchaser may request changes in data collection schedule on an as needed basis. - The data from DWLR stations will be transmitted through GSM/GPRS in the standard CSV format (as specified in technical Specifications) to FTP server at the State Data Center(SDC) - From SDC to E-SWIS software through internet. This data will be processed and disseminated via E- SWIS cloud. The processed data from e-SWIS in the form of reports/bulletins will be transmitted to State Data Centre.		
2	Data maintenance : All activities pertaining to installation, data services, Operation & maintenance at the remote DWLR station will be maintained by the bidder during the warranty and maintenance period and will include a log of activities during every station visit.		
3	Reports & Bulletins Storage system: Storage of all data, reports& bulletins in the proper manner and easy to access. This data will be backed up in such a way that it is not possible to lose data that has already been stored with the use of mirrored or replicated storage.		
4	Help desk : Bidder to operate help desk to respond to queries from the purchaser. Help desk will be able to solve any problems related to data collection, processing, and dissemination to the purchaser. Help desk shall be available from 8am to 6pm, Monday –Sat.		
Sl no.	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
B.	Specifications for Data Transmission System (Telemetry)		

1.	The transmission system should be tightly integrated with the DWLR system, along with compact remote/field mounted systems consisting of sensor, data logger, modem and antenna		
2.	The system should be watertight (IP68 for sensor & IP65 for data logger or equivalent or as mentioned in Technical Specifications) and impact resistant.		
3.	The system should allow easy access into the well for monitoring measurements without removing complete system;		
4.	System must be power-supplied by standard lithium/alkaline batteries for operation time of at least two years by one set of batteries (one transmission per day, 4 measurements per day) and must be placed in a water resistant (IP65 or equivalent) enclosure. The replacement of batteries during five years warranty period would be responsibility of the bidder, at bidder's cost		
5.	The system must have integrated energy management system using free programmable time slots for measurement and transmission to minimize power consumption;		
6.	The connectors should be water-tight (IP68 or equivalent or as mentioned in Technical Specifications).		
7.	An alarm notification must be sent by the system via SMS to user defined phone numbers through suitable means of communication for user defined parameters. This includes battery performance (battery voltage).		
8.	A standard USB /RS-232 communication interface or as mentioned in Technical Specifications should be available for set up and configuration and must be easily accessible.		
9	Data logger shall be provided with Atmospheric Pressure sensor at individual station, & Atmospheric Pressure correction shall applied automatically on the raw water level reading from non-vented water level sensor. The details of correction procedure shall be fully documented in user manual. Provision shall be made to view and store the raw and compensated water level data along with atmospheric pressure and Water Temperature data in data logger memory.		
10.	All measurement and set up options, data download and programming of data logger shall also be done by online session similar to all functions at site by direct connection to a PC.		

11.	Data download / retrieval from remote DWLR station to central server PC via GSM/GPRS network shall be provided. The data from remote station should be in standard CSV format (as specified in technical Specifications) which is compatible with e-SWIS software.		
12.	The software should be provided to allow download of data from the DWLR data logger on to a Laptop/hand held devices in the field. The downloaded data shall be in standard CSV format (as specified in technical specifications) which is compatible with e-SWIS software.		
C.	Fencing with wire mesh (76mm x 76mm x 12 gauge) shall be provided around each piezometer site as per the drawing and specifications provided.		

Specifications of Cloud Server

SI	Required Specification and Standards as per Bidding Document	Specification and Standards as offered in by Bidder	Remarks
	Cloud Server	<u>Make:</u> <u>Model:</u> <u>Manufacturer Name, address, email, phone, website.</u>	

List of sites:

S. No.	District	Block	Panchayat	Site Location/Landmark	Proposed Wells	Geo-Coordinate
1	Muzaffarpur	Mushahari	Khabda	Jorawar Pond located front of Rajkiy Prathmik Vidhyalay and Swasthya Upkendra.	Recharge Pond (RP-01)-Piezometer Well	26°05'56.5"N 85°22'05.8"E
2			Patahi	Patahi Jagganath Pond located side of Baba Bhadrakaleshwar Shiv Temple	Recharge Pond (RP-02)- Piezometer Well	26°07'10.9"N 85°20'37.3"E
3				Patahi hari, Purauni Pond Near Hanuman Temple	Recharge Pond (RP-03)- Piezometer Well	26°06'16.4"N 85°20'35.1"E
4		Sakra	Chandanpatti	Behind M.S. Chandanpatti School.	Recharge Pond (RP-04)- Piezometer Well	25°57'12.2"N 85°35'15.1"E
5		Aurai	Jajuwar	Bridge-01 at the entry of village on Budhnagra Samari (Mangara) Nadi	Check Dam/Anicut (CD-01)- Piezometer Well	26°19'08.2"N 85°38'38.2"E
6				Bridge-02 at the end of village on Budhnagra (Mangara) Nadi	Check Dam/Anicut (CD-02)	26°19'08.4"N 85°39'26.1"E
7				Bhorha Pond located just entrance of the village	Recharge Pond (RP-05)	26°18'45.5"N 85°38'31.7"E
8			Ratwara (Wast)	Chandiha village, near Sunni Razwi Masjid	Recharge Pond (RP-06)	26°18'24.7"N 85°34'53.4"E
9			Bhadai	Dakrama nadi puliya	Check Dam/Anicut (CD-03)- Piezometer Well	26°17'40.1"N 85°27'35.2"E
10	Samastipur	Samastipur	Bhusari	Beside of Waste Processing Unit, at end of the village	Recharge Pond (RP-07)- Piezometer Well	25°49'35.0"N 85°52'15.4"E
11		Tajpur	Fatehpur wala	150 m South from Fatehpur diah road	Recharge Pond (RP-08)- Piezometer Well	25°50'02.0"N 85°41'47.6"E
12		Shivajinagar	Dahiyar Ranna	Brabara Nadi connected with Bhagmati (Kareh) nadi	Check Dam/Anicut (CD-04)- Piezometer Well	25°55'36.3"N 86°02'29.0"E

Note: - The locations shown in above table are tentative. Hence, the particulars in above table may be changed due to administrative or any other reason. No claim, what so ever, on this account shall be entertained.

FREQUENCY FOR MANDATORY TESTS

Sl. No.	Item	Quantities as per agreement	Frequency as per specification	Test to be carried out	No. of tests required	Upto date quantity	No. of tests required	No. of tests actually done	Remarks
1	Water		Water from each source shall be got tested before the commencement of work and thereafter once in every 03 months till the completion of work	(as per IS 3025) PH Value, Limit of alkalinity percentage of solids: a) Chloride b) Suspended Matter c) Sulphates d) Inorganic Solids e) Organic Solids					
2	Cement		Every 50 tonnes or part thereof. Each brand of cement brought at site shall be tested as per this frequency	(as per IS 4031, part-II-VI) Physical requirement: a) Fineness b) Soundness c) Setting Time (Initial & Final) d) Consistency of cement paste					
3	Sand			a) Organic impurities. b) Silt Content c) Particles Size					

				Distribution d) Bulking of Sand					
4	Stone Aggregate		For all quantity	Percentage of soft or deleterious material					
			Every 45 m ³ or Part thereof for RCC works only. For other items 50 m ³ or Part thereof	Particles Size Distribution					
			Every 40 m ³ or Part thereof	a) Estimation of Organic Impurities b) Aggregate Impact Value					
5	Concrete		a) 15 m ³ or Part thereof b) 20m ³ or Part thereof	a) Slump Test b) Compressive Strength Test					
6	Stone		Water Absorption Test	100 m ² / 20 m ³ or Part thereof or Change of Source as per direction of Engineer-In- Charge					

Above statement of mandatory test shall be submitted along with each bill

Note: - Site record to be maintained:

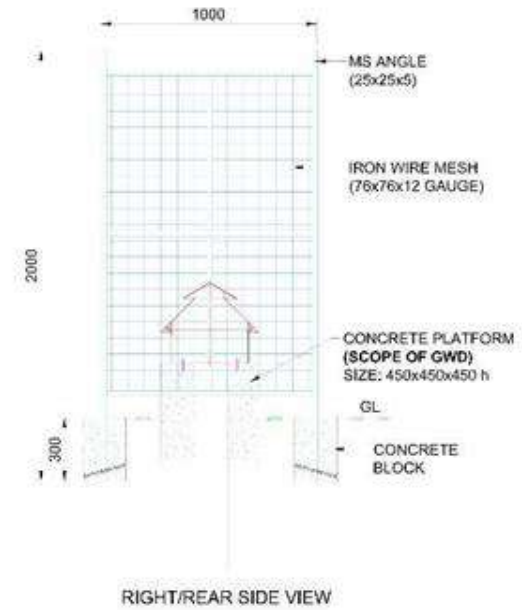
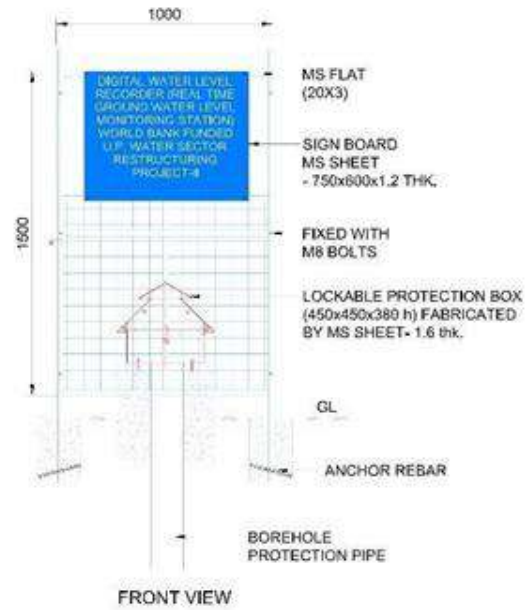
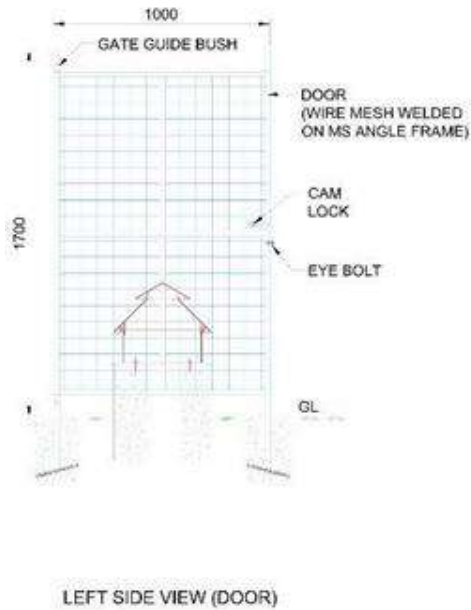
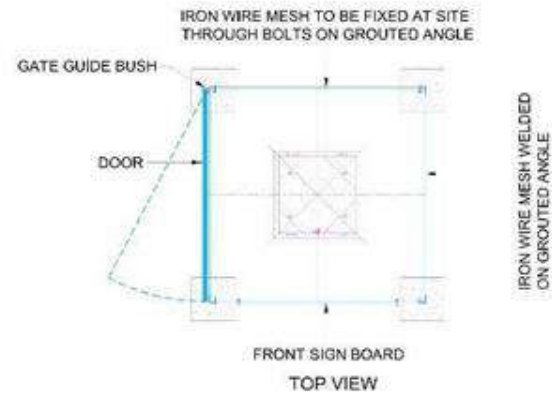
- a) Cement Register
- b) Site Order Book (Site Instruction Book)
- c) Inspection Register
- d) Test Register

e) Measurement Book (Manual as well as Computerized)

TYPICAL DRAWINGS

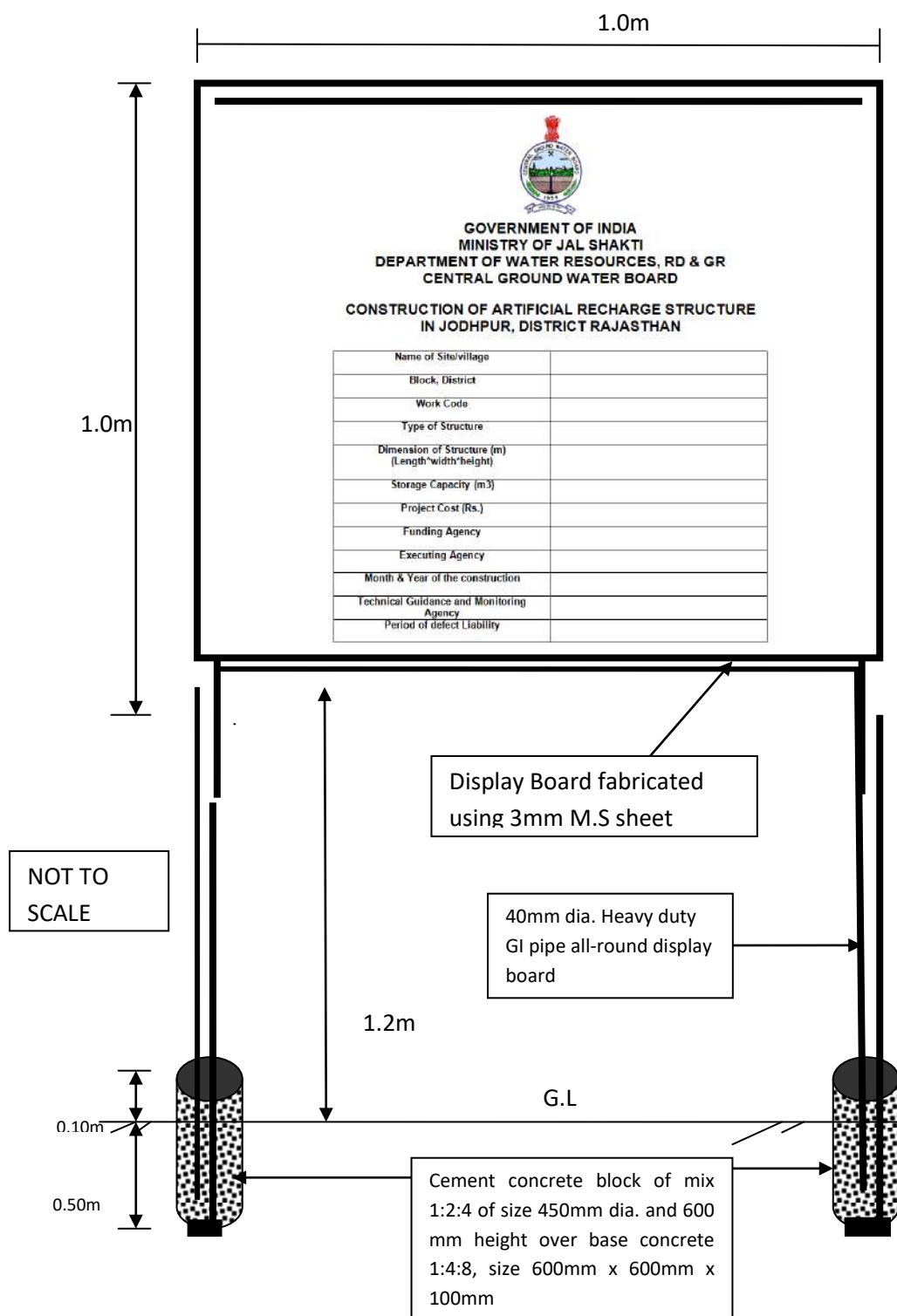
Schematic Plan (Sample Typical Drawing) for Piezometer Well is appended with the tender. Actual working drawing for Piezometer Well shall be given to successful bidder after award of work.

Drawing of Fencing on Protection Box

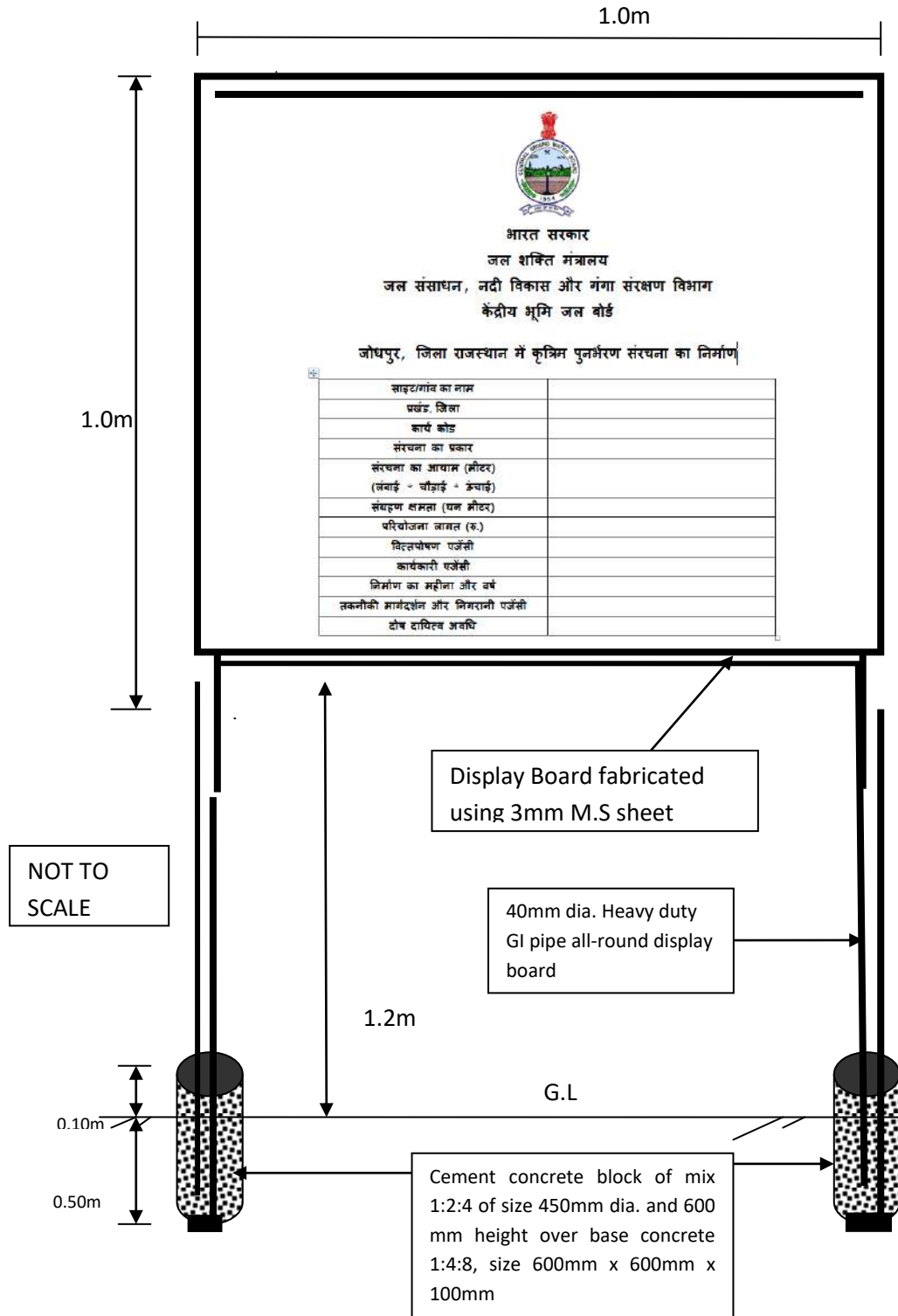


Display Board:

After the completion of Artificial Recharge Structure, the contractor will install Display Board at each site as per drawing given below. The matter to be written on display board shall be got approved from WAPCOS/CGWB well in advance. Cement Concrete block shall be finished with cement mortar 1:3 (1 Cement : 3 Fine Sand). There may be minor change in the drawing as per site requirement. Sample display board shall be got approved from WAPCOS before actual execution well in advance.

SAMPLE DRAWING OF DISPLAY BOARD (FRONT SIDE)

SAMPLE DRAWING OF DISPLAY BOARD



Forms

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF STATUTORY AUDITOR OF BIDDER]

FORM "A" FINANCIAL STRENGTH

SUB-FORM 'A1'

FINANCIAL INFORMATION

- I. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached)

Annual Turnover Data (DWLR/Equipments Works only)			
Years	Annual Turnover	Profit/Loss (After Tax)	Net Worth
	In INR	In INR	In INR
2025-2026			
2024-2025			
2023-2024			
2022-2023			
2021-2022			
Average Annual Turnover *			

*Balance sheets, profit and loss statements, auditors' report (in case of companies/corporation) etc.

List them below and attach copies duly certified by CA.

- a) Gross annual turnover on DWLR/Equipments works.
- b) Profit/Loss (After Tax).

II. Bankers' Certificate

III. Solvency Certificate from Bankers of the bidder in the prescribed Sub-form "A2"

Signature of Bidder(s) with Seal

Signature of Chartered Accountant with Seal & UDIN (Unique Document Identification Number)

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF ISSUING BANK]

SUB-FORM "A2"

FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK

Date:.....

To

WAPCOS Limited,
76-C, Institutional Area,
Sector-18, Gurugram, Haryana

This is to certify that to the best of our knowledge and information that Shri/Smt/M/Shaving registered address....., a customer of our bank is/are respectable and can be treated as reliable for any engagement upto a limit of Rs..... (Rupees.....).

This certificate is issued on the request of Shri/Smt/M/S for tendering purpose.

(Signature)

Name of Bank official with Designation

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF ISSUING BANK]

SUB-FORM "A3"

FORM OF SOLVENCY CERTIFICATE

Date:.....

To
WAPCOS Limited,
76-C, Institutional Area,
Sector-18, Gurugram, Haryana

This is to certify that Shri/Smt/M/S(name of bidder and address)..... as customer of our Bank Account is/are respectable and can be treated as good for any engagement upto a limit of Rs..... (Rupees.....) for the work of WAPCOS Tender for **"Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"**.

(Signature)

Name of Bank official with
Designation

NOTE:

- 1) Solvency Certificate should be on letter head of the Bank addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana. The language of this Form may be changed as per the standard format of Bank at the place of ".....", without affecting the objective.
- 2) The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extension of date for bid submission, if any.
- 3) Solvency Certificate shall be specific to this Bid submission only and mentioning the name of the work/project.
- 4) The certificate shall be submitted in original and the colour / b&w copy / scanned copy shall not be accepted.
- 5) The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate.
- 6) This Certificates will be verified from the issuing authority by WAPCOS during process of Technical Evaluation.

(On Bidder's Letter Head)

FORM B

PERSONNEL AND ESTABLISHMENT

SUB- FORM "B1" STRUCTURE & ORGANISATION

1. Name & address of the bidder:
2. Telephone no./Telex no./Fax no.:
3. Legal status of the bidder (attach copies of original document defining the legal status):
 - a) An Individual
 - b) A proprietary firm
 - c) A firm in partnership
 - d) A limited company or Corporation
4. Particulars of registration with various Government Bodies (attach attested photocopy)

Organisation/Place of Registration

Registration No.

1

2

3

5. Names and titles of Directors and Officers with designation to be concerned with this work.
6. Designation of individuals authorized to act for the organization.
7. Was the bidder ever required to suspend construction for a period of more than six months continuously after he commenced the construction? If so, give the name of the project and reasons of suspension of work.
8. Has the bidder or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.
9. Has the bidder or any constituent partner in case of partnership firm, ever been Debarred/Black listed for tendering in any organization at any time? If so, give details.
10. Has the bidder or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
11. In which field of DWLR Works the bidder has specialization and interest?
12. Any other information considered necessary but not included above.

Signature of Bidder(s) with Seal

(On Bidder's Letter Head)

SUB-FORM "B2"**DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK**

S.No.	Designation	Total Number	Number available for this work	Name	Qualifications	Professional experience and details of work carried out	How these would be involved in this work	Remarks
1	2	3	4	5	6	7	8	9

Signature of Bidder(s) with Seal

Statement of compliance under the requirements of the Volume I Conditions of Contract, Clause 1.2 of the Instructions for Bidders. (Chapter - I, Volume I – Conditions of Contract)

(On Bidder's Letter Head)

SUB-FORM "B3"

LIST OF CONSTRUCTION MACHINERIES/EQUIPMENT PROPOSED TO BE DEPLOYED

S.NO.	Name of machineries/equ ipment	Name of Manufacturer	Year of Manufacturi ng	Capacity	Special skills required	Ownership details	Remarks

Signature of Bidder(s) with Seal

(On Bidder's Letter Head)

Form C

C-(a): Format for similar works awarded/presently under construction

Description of Work	Place & State	Contract No. & Date	Value of Contract (Rs Lakh)	Stipulated period of completion	Value of works to be completed (Rs Lakh)	Anticipated date of completion

C-(b): Details for proof of payment in respect of works mentioned in above table C-(a).

Sl. No.	Name of Employer	Work Order/Agreement Reference	Payment Received (Rs Lakh)	Page no of documentary proof for payment received enclosed in the bid

Signature of Bidder(s) with Seal

(On Bidder's Letter Head)

C(c): CORRESPONDENCE DETAILS OF ISSUING AUTHORITY**SOLVENCY CERTIFICATE/COMPLETION CERTIFICATE**

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar".

A. Solvency/Banker's Certificate

Present address of the Issuing Branch	Official Email Id	Landline No.	Other Contact No..

B. Completion Certificates

Present address of the Issuing Authority	Official Email Id	Landline No.	Other Contact No.

This is to certify that above information is correct and is gathered from the Issuing Authorities by us for the verification of concerned documents. We understand that if the documents are not verified, then our bid is liable to be rejected.

Date:**Place:**

**(Signature and Stamp
of the Authorized signatory)**

(On Bidder's Letter Head)**FORM- D: - BID CAPACITY**

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

Available bid capacity = $A \times 1.5 \times N - B$

Where,

A = Maximum value of DWLR (similar nature of work as defined and relevant to work being procured) works executed in any one year during the last five years (updated at the current price level), taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the work in question.

B = Value (updated at the current price level) of the existing commitments and ongoing works to be completed in the next 'N' years.

Existing Commitments & on-going works details:

Description of work	Location	Contract no.	Name of address of Client	Value of Contract (Rs. Cr.)	Stipulated period of completion	Value of remaining Work (Rs. cr.)	Anticipated date of completion

NOTE:

The bidder shall furnish statements showing the value of existing commitments and on-going works as well as stipulated period of completion remaining for each of the works separately.

The value of executed works shall be brought to the current level by enhancing the actual value of work done at a simple rate of 7% per annum, calculated from the date of completion of last day of the month previous to the one in which applications are invited.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)**FORM- E: - UNDERTAKING FOR MANPOWER DEPLOYMENT**

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

This is to certify that We, M/s,
in submission of this offer confirm that:-

- I. Our tender is offered taking due consideration of all factors including site requirements information and conditions stated in the detailed Instructions to Bidders to execute the work up to the standards as laid out in Employer's Requirements and other sections of Tender Document.
- II. We agree to employ the number of technical staff during the execution of this work as defined in the tender document. We shall deploy additional manpower as deemed fit and required to complete the project within stipulated completion period, without any additional cost to the Employer.
- III. WAPCOS shall have full power and without giving any reason to us, immediately to get removed any representative, staff and workmen or employees on account of misconduct negligence or incompetence or whose continued employment may in his opinion be undesirable. We shall not claim any compensation on this account.
- IV. In case we fail to deploy the technical staff as mentioned in the tender document, we shall be liable to pay recovery for each month of default as mentioned in Tender Documents. The details of Deployment of Technical Staff will be submitted with each Bill duly certified by The Project Manager, WAPCOS. We shall not raise any objection if deduction is made for the same from Running Bills.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)

FORM-F: NO-CONVICTION CERTIFICATE

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

This is to certify that _____ (Name of the organization), having registered office at _____ (Address of the registered office) has never been convicted by any Central/State Government Department or Court of law anywhere in the country.

This is also to certify that we are not involved in any form of Corrupt and Fraudulent Practices in past and will never be involved in future.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)

FORM-G: NO DEVIATION CERTIFICATE

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

This is to confirm that as per Tender conditions we have visited site before submission of our Offer and noted the job content and site condition etc. We also confirm that we have not changed/modified the above tender document and in case of observance of the same at any stage it shall be treated as null and void.

We hereby also confirm that we have not taken any deviation from Tender Clauses together with other references as enumerated in the above referred Notice Inviting Tender and we hereby convey our unconditional acceptance to all terms & conditions as stipulated in the Tender Document.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null and void.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)

FORM-H: UNDERTAKING REGARDING BLACKLISTING/NON DEBARMENT

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

This is to certify that we have taken the cognizance of Blacklisting Policy of WAPCOS Ltd. Further, we hereby Confirm and declare that we, M/s....., is not blacklisted/De-registered/debarred by any Government Department/Public Sector Undertaking/Private Sector/or any other agency for which we have Executed /Undertaken the works/Services during the last 5 Years.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Firm's Letter Head)

FORM-I: UNDERTAKING FOR NOT CORRUPT/FRAUDULENT PRACTICES

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

Certified that I/We (Name) _____ are not under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of India or by any State Government of India/any multilateral institutions or any project authorities till date.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)

FORM-J: UNDERTAKING FOR RULE 144 (XI) IN THE GENERAL FINANCIAL RULES-2017

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

I/We(Name of the Firm) well aware about the Restrictions under RULE 144 (XI) In General Financial Rules (GFR), 2017 on procurement from country which shares a land border with India. I/We hereby certify that we are eligible to participate in the tender as per Rule 144 (xi) in the General Financial Rules (GFR), 2017

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)

FORM-K: PREFERENCE TO MAKE IN INDIA (UNDERTAKING REGARDING PERCENTAGE OF LOCAL CONTENT)

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

We,....., a Chartered Accountant firm having our registered office address.....hereby state that, we are Statutory Auditor of the Company M/s..... (CIN).

The Bidder is bidding for the " (Name of work)

We have understood the provisions of Public Procurement (Preference to make in India) Local content Policy against WAPCOS Tender NIT No. Date -.....

We on the basis of the bidder's representation received, hereby confirm that, offer is achieving the minimum local content target as per of above Policy shall be **50%**.

Date:

(Signature of Statutory Auditor with Seal)

Place:

UDIN No. :

(On Bidder's Letter Head)**FORM-L: LITIGATION HISTORY**

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

Name of Bidder:.....

Bidder(s) should provide information on any history of litigation or arbitration resulting from contracts executed in the last five (5) years or currently under execution.

Year	Name of Work	Name and address of client, cause of litigation, and matter in dispute	Disputed amount in Rs.	Actual award amount in Rs.

Information Regarding Current Litigation, Debarring / Expelling of Bidder or Abandonment of Work by Bidder.

- a)
 - i. Has the Bidder consistent history of Litigation.....Yes/No
 - ii. If yes, give details:
- b)
 - i. Has the Bidder been debarred/ expelled by any Agency in India, during the last 5 years on the date of application except on account of reasons other than non- performance, Yes/No
 - ii. If yes, give details:
- c)
 - i. Has the Bidder abandoned any contract work during the last 5 years...Yes/No
 - ii. If yes, give details:
- d)
 - i. Has the Bidder been declared bankrupt during the last 5 years...Yes/No
 - ii. If yes, give details, including present status:
- e)
 - i. Has the Bidder been debarred by client or by any Department... Yes/No
 - ii. If yes, give details:

Note:

- i. Separate sheet may be used for giving detailed information.

If any information in this schedule is found to be incorrect or concealed, pre- Qualification of bidder will be summarily rejected.

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

(On Bidder's Letter Head)**FORM-M: SITE VISIT/ UNDERSTANDING THE PROJECT SITE CERTIFICATE OF INTENDING BIDDER**

Name of Work: "Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"

I/We (Name of Intending Bidder).....have inspected and examine the sites and its surroundings and satisfy before submitting bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation may require and in general shall obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect the bid in order to avoid impractical and non-serious bids.

I/We (Name of Intending Bidder)..... shall be deemed to have full knowledge of the site and no extra charge consequent on any misunderstanding or otherwise shall be allowed.

I/We (Name of Intending Bidder)..... shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents.

Submission of a bid by (Name of Intending Bidder)..... implies that I/We read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to (Name of Intending Bidder).....by the Government and local conditions and other factors having a bearing on the execution of the work.

Date:

Place:

(Signature of site visit representative of Bidder)

(Certification of site visit, representative of WAPCOS)

SCHEDULES

SCHEDULE NO. 1**SCHEDULE OF TESTS**

The various tests to be performed on the various equipment and its components shall be listed out below by the tenderer in sequential order in which these tests will be carried out. The Purchaser, however, reserves the right to modify the sequence of these test.

Sl. No. Equipment / Components	Tests	Remarks

For M/s. _____

Signature _____

(By its constituted attorney)

(Seal)

Date _____

Place _____

Note:

Continuation to sheets of like size and formats may be used as per bidder's requirement and shall be annexed to this schedule.

The Tender or shall give below the list of special maintenance and erection tools and tackles offered by him. The price of each item of the tools and tackles shall be furnished separately in the price in the price bid of the tender, if require.

Sl. No.	Details	Quantity	Remarks
---------	---------	----------	---------

Place _____

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SCHEDULE NO. 3**ADDITIONAL INFORMATION INCLUDED WITH THE PROPOSAL**

We have enclosed with our proposal the following additional information:

Sl. No.	Reference and page No.	Description of information
---------	------------------------	----------------------------

For M/s. _____

Signature _____

(By its constituted attorney)

(Seal)

Date _____

Place _____

Note:

Continuation to sheets of like size and formats may be used as per bidder's requirement and shall be annexed to this schedule.

SCHEDULE NO. 4

SCHEDULE OF WEIGHTS & DIMENSIONS

The weights and dimensions of various packages for shipment are given below:

[illegible]

For M/s. _____

Signature _____

(By its constituted attorney)

(Seal)

Date _____

Place _____

Note:

Continuation to sheets of like size and formats may be used as per bidder's requirement and shall be annexed to this schedule.

SCHEDULE NO. 5**SCHEDULE OF SUBMISSION OF DRAWINGS/DOCUMENTS**

The Tenderer shall list in this schedule all the drawings / documents etc., to be supplied by him as also the date by which each of the drawings / documents etc., would be made available to the Purchaser in the event of placement of order on him.

Sl. No.	Title of the Drawings / Documents	Reference to specifications Clause, if any	Date by which details shall be submitted to the Purchaser	Remarks required from the purchaser, if any
---------	-----------------------------------	--	---	---

For M/s. _____

Signature _____

(By its constituted attorney)

(Seal)

Date _____

Place _____

Note:

Continuation to sheets of like size and formats may be used as per bidder's requirement and shall be annexed to this schedule.

SCHEDULE NO. 6**PERFORMANCE GUARANTEE**

We hereby guarantee the requirements of this specification. If any of the requirements of the specification is not fulfilled and if capacity, performance and efficiency obtained during acceptance tests fall short of that guaranteed by the Tenderer, the Tenderer hereby affirms that such deficiency will be made good by rectifying / replacing the defective parts within a reasonable time. The tenderer shall bear the whole cost of repair and replacement of defective parts. All the replaced parts shall be removed from the site. While the facility for making goods the deficiency will be normally given once, the Purchaser is entitle to reject the equipment in case of repeated failure to meet the guarantee as per the contract.

Signature _____

Name _____

Designation _____

Common Seal _____

Date _____

Place _____

SCHEDULE NO. 7**LIST OF REGISTERS TO BE MAINTAINED AT SITE (TO BE CUSTOMIZED AS PER SITE REQUIREMENTS)**

1. Site order book
2. Cement register
3. Steel register
4. Concrete cube compressive strength test
5. Slump register
6. Fine aggregate sieve analysis
7. Fine aggregate silt content test
8. 10mm aggregate sieve analysis
9. 10mm aggregate impact value
10. 10mm aggregate Crushing value
11. 20mm aggregate sieve analysis
12. 20mm aggregate impact value
13. 20mm aggregate Crushing value
14. Bricks compressive strength
15. AAC Blocks compressive strength (if applicable)
16. Flakiness and elongation index
17. Rolling margin register
18. 3rd Party Tests Reports

Signature _____

Name _____

Designation _____

Common Seal _____

Date _____

Place _____

Note:

Continuation to sheets of like size and formats may be used as per bidder's requirement and shall be annexed to this schedule.

SCHEDULE NO. 8

FORMAT OF MATERIAL REGISTER
(TO BE CUSTOMIZED AS PER SIRE REQUIREMENTS)

Name of Work:

Name of Contractor:

Name of Item/Construction material:

Total Quantity Required:

Source:

Minimum Size of one Lot:

S.No.	Date	Previous Quantity	Invoice/ Bill No.	Additional Quantity procured	Cumulative Quantity	Issued/ consumed	Cumulative Issue	Balance Outstanding Quantity	Present requirement	Signature of Contractor
1.										
2.										
3.										
4.										
5.										
6.										

Signature:

Signature:

Name :

Name:

Date :

Date:

For Contractor:

For Department:

Note:

Continuation to sheets of like size and formats may be used as per bidder's requirement and shall be annexed to this schedule.

Annexures

ANNEXURE I**FORM OF BANK GUARANTEE FOR EARNEST MONEY DEPOSIT**

To,
WAPCOS LTD.
76-C, Sector 18,
Gurugram-122015

WHEREAS, (Name of Bidder) _____ (hereinafter called "the BIDDER") has submitted his bid dated (_____ for the construction of (Name of Contract) _____ (hereinafter called "the Bid").

KNOW ALL MEN by these presents that we (Name of Bank) _____ of (name of Country) _____ having our registered office at _____ (hereinafter called "the Bank") are bound unto the WAPCOS Ltd. in the sum of _____ for which payment well and truly to be made to the WAPCOS Ltd. the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 2026.

THE CONDITIONS of this obligation are:

- i) If the Bidder withdraws his Bid during the period or bid validity specified in the form of Bid; or
- ii) If the Bidder having been notified of the acceptance of his Bid by WAPCOS Ltd. during the period of bid validity.
 - a) fails or refuses to execute the proforma of Agreement in accordance with the Instruction to Bidders, if required; or
 - b) fails or refuses to furnish the Performance Security , in accordance with the Instructions to Bidder,

We undertake to pay to WAPCOS Ltd. upto the above amount upon receipt of its first written demand, provided that in its demand WAPCOS Ltd. will note that amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date 180 days after the closing date for submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

SIGNATURE OF THE BANK

SEAL

DATE.....

WITNESS

(Signature , Name and Address).

ANNEXURE – II

Form of Bid (Letter of Transmittal for Financial Bid)
(On Bidder's Letter Head)

To

Subject: Bid for Construction of

 (Description of Works)

Sir,

With reference to the Bidding Documents forwarded to us under your letter no. _____ dated _____

1. We the undersigned, having examined the drawings, conditions of contract, specifications and Bill of Quantities for the execution of the above named works offer to execute and complete the whole of the said works in conformity with the said drawing, conditions of contract, specifications and Bill of Quantities given in the bidding document.
2. I/We hereby submit our FINANCIAL BID and Offer Cost as filled in BoQ(s) excel sheet(s) for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.
3. The Bid Security/EMD for the amount of Rs. _____ in the form of _____ is enclosed.
4. We undertake, if our bid is accepted, to commence the works within Fifteen (15) days of receipt of the orders of the Engineer-in-Charge to commence and to complete and deliver the whole of the works comprised in the contract within _____ months (time should conform to the timing specified by WAPCOS in the bidding documents) calculated from the last day of the aforesaid period in which the works are to be commenced.
5. If our Bid is accepted, we will furnish a performance security in the form of the bank guarantee to be jointly and severally bound with us in an amount of Five (05) percent of the above name sum in accordance with the condition of condition of contract.
6. We agree to abide by this bid for the period of **(120 days)** calendar days from the date of opening of Techno-Commercial Bid and it shall remain binding upon us and may be accepted at any time before the expiration of the period.
6. Unless and until a formal contract agreement is executed, this bid, subsequent correspondences together with the Letter of Award (LoA) of WAPCOS shall constitute a binding contract between us and WAPCOS.

7. We understand that WAPCOS is at liberty not to accept the lowest bid price. We also understand that WAPCOS is at liberty not to accept any or all bids and WAPCOS is at liberty to negotiate with Bidder(s) at any stage.

Dated this _____ day of _____ 2026.

(Signature and Full Name)

Title _____

(affix seal here)

Firm's address:

Telephone:

Telex:

Cable Address:

Fax:

Witness

(Signature and Full Name)

ANNEXURE - III**FORM OF AGREEMENT**

Note: This form is included in the Bidding Documents only for the information of Bidders. Only the successful Bidder shall, in due course, be required to fill this form

THIS AGREEMENT MADE the _____ day of _____ 2026 BETWEEN WAPCOS Ltd.
 _____ of (Mailing address of WAPCOS) _____ (hereinafter called "the
 WAPCOS") of the one part and (Name of Contractor) _____ of (Mailing address of Contractor)
 _____ (hereinafter called "the Contractor") of the other part.

WHEREAS the WAPCOS is desirous that certain Works should be executed viz. (Brief description of
 Works) _____ and has, by a Letter of Acceptance dated _____ accepted a
 Bid by the Contractor for the execution and completion of such Works.

NOW THIS AGREEMENT WITHNESSETH as follows;

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz;
 - a) This form of Agreement
 - b) The Letter of Acceptance
 - c) The additional Conditions of Contract.
 - d) The General Conditions of Contract.
 - e) The Technical Specifications
 - f) The Drawings
 - g) The Priced Bill of Quantities.
 - h) The said Bid and Appendix, if any.
 - i) The Invitation to bid.
 - j) The Instructions for Bidders
 - k) The Schedules of Supplementary Information, if any.
3. The aforesaid documents shall be taken as complementary and mutually explanatory of one another, but in case of ambiguities or discrepancies, shall take precedence in the order set out above.
4. In consideration of the payment to be made by WAPCOS Ltd. to the Contractor as hereinafter mentioned, the Contractor hereby covenants with WAPCOS Ltd to execute and complete the Works in conformity, in all respects, with the provisions of the Contract.
5. WAPCOS Ltd. hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works the Contract Price at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused their respective common Seals to be hereunto affixed
(or have hereunto set their respective hands and Seals) the and year first above written.

SIGNED, SEALED AND DELIVERED

By the said

By the said

NAME _____

NAME _____

On behalf of the Contractor

On behalf of the WAPCOS

In the presence of;

in the presence of;

NAME _____

NAME _____

Address _____

Address _____

ANNEXURE - IV

FORM OF BANK GUARANTEE FOR PERFORMAMNCE SECURITY

WAPCOS Limited,
76-C, Sector 18,
Gurugram-122015.

In consideration of _____ (Employer's name) (hereinafter referred to as "the Employer") which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to _____ (Contractor's name & address) (hereinafter referred to as "the Contractor " which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer's Notification of Award No. _____ dt. _____ and the same having been unequivocally accepted by the Contractor, resulting into a contract valued at Rs. _____ (Rupees _____ only) for _____ (name of work) (hereinafter called " the contract") and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire contract equivalent to Rs. _____ (Rupees _____ only) (05 % of the said value of the Contract to the Employer.

We, _____ (name & address of bank) (hereinafter referred to as "the Bank" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer, on demand any or, all monies payable by the Contractor to the extent of Rs. _____ (Rupees _____ only) as aforesaid at any time upto _____ without any demur, reservation, contest , recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Employer and further agrees that the guarantee herein contained shall continue to be enforceable till the Employer discharges this guarantee.

We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said Contractor and accordingly discharges the guarantee.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from, time to time to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The bank shall not be released of its

obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank. The guarantee shall not be affected by a change in the constitution of the bank or of the employer.

The bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

We The Said Bank do hereby declare that we have absolute and unconditional power to issue this guarantee in your favour under the Memorandum and Articles of Association or such other constitutional documents of the Bank and the undersigned have full power to execute this guarantee under the Power of Attorney/ Post Approval Authorization dated _____ of the bank granted to him / us by the Bank. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the powers of the bank or its officials and the guarantee shall be deemed to have been issued as if the bank and its officials have all the powers and authorization to give this guarantee on behalf of the bank.

We the said bank do hereby certify the genuineness and appropriateness of the Stamp paper and stamp value used for issuing the guarantee. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the stamp paper or its stamp value.

We the said bank do hereby declare that our payments hereunder shall be made to you , free and clear of and without and deduction, reduction on account of any reasons including any and all present and future taxes, levies, charges of withholding whatsoever imposed or collected with respect thereto.

Notwithstanding anything contained hereinabove our liability under this guarantee is restricted to Rs. _____ (Rupees _____ only) and it shall remain in force upto and including _____ and shall be extended from time to time for such period as may be desired by M/S WAPCOS Limited on whose behalf this bank guarantee has been given.

Notwithstanding anything contained herein

- i) our liability under this guarantee shall not exceed Rs. _____ (Rupees _____ only);
- ii) This bank guarantee shall be valid upto and till _____ only, being the date of expiry of the guarantee and
- iii) We are liable to pay up to the guaranteed amount only and only if we receive from you a written claim or demand within the claim period not later than 12 months from the said expiry date relating to default that happened during the guarantee period and all your rights under this bank guarantee shall be extinguished and our liability under the bank guarantee shall stand discharged unless such written claim or demand is received by us from you on or before being the date of expiry of the guarantee
Dated this _____ day of _____ at Gurugram.

ANNEXURE -V**PROFORMA FOR BANK GUARANTEE FOR ADVANCE FOR MOBILISATION**

WAPCOS Limited,
76-C, Sector 18,
Gurgaon-122015.

In consideration of WAPCOS LTD. (hereinafter referred to as "the Employer") which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to _____ (Contractor's name) with its Registered /Head Office at _____ (hereinafter referred to as "the Contractor " which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer's Notification of Award No. _____ dt. _____ and the same having been unequivocally accepted by the Contractor, resulting into a contract valued at Rs. _____ (Rupees) _____ only) for _____ (hereinafter called " the contract") and the Employer having agreed to make an advance payment to the Contractor for performance of the above Contract amounting to Rs. _____ (Rupees _____ only) as an advance against bank guarantee to be furnished by the Contractor.

We, _____ (name & address of bank) having its Head Office at _____ (hereinafter referred to as "the Bank" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand any or, all monies payable by the Contractor to the extent of Rs. _____ (Rupees _____ only) (110% of Mobilization Advance) as aforesaid at any time upto _____ without any demur, reservation, contest , recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Employer discharges this guarantee. We further agree that no change in the constitution of the Bank or of the Employer shall affect this guarantee.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from time to time, to vary the advance or to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank.

The bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and

notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the powers of the bank or its officials and the guarantee shall be deemed to have been issued as if the bank and its officials have all the powers and authorization to give this guarantee on behalf of the bank.

We the said bank does hereby certify the genuineness and appropriateness of the Stamp paper and stamp value used for issuing the guarantee. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the stamp paper or its stamp value.

We the said bank do hereby declare that our payments hereunder shall be made to you , free and clear of and without and deduction, reduction on account of any reasons including any and all present and future taxes, levies, charges of withholding whatsoever imposed or collected with respect thereto.

Notwithstanding anything contained hereinabove our liability under this guarantee is limited to Rs. _____ (Rupees _____ only) and it shall remain in force upto and including _____ and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/S _____ on whose behalf this bank guarantee has been given.

Notwithstanding anything contained herein

- i) our liability under this guarantee shall not exceed Rs. _____ (Rupees _____ only);
- iv) This bank guarantee shall be valid upto and till _____ only, being the date of expiry of the guarantee and
 - iii) We are liable to pay up to the guaranteed amount only and only if we receive from you a written claim or demand within the claim period not later than 12 months from the said expiry date relating to default that happened during the guarantee period and all your rights under this bank guarantee shall be extinguished and our liability under the bank guarantee shall stand discharged unless such written claim or demand is received by us from you on or before being the date of expiry of the guarantee.
 - iv) Dated this _____ day of _____ at Gurugram.

WITNESS

(Signature)

(Name)

(Official address)

(Signature)

(Name)

(Signature)

(Name)

(Designation with bank stamp)

Attorney as Power of Attorney

No. _____ dt. _____

ANNEXURE -VI

**Tender Form (Letter of Transmittal for Technical Bid)
(On Bidder's Letter Head)**

To
Deputy Chief Engineer (WR&WS)
WAPCOS Ltd.
76-C, Sector – 18, Institutional Area
Gurugram, Haryana – 122015

Dear Sir,

- 1) I/We have read and examined the following tender documents relating to the under mentioned work: **Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar.**
 - a) Notice inviting tender
 - b) Brief description of the work
 - c) Instructions for tenders
 - d) General conditions of contract
 - e) Additional conditions of Contract
 - f) Annexures
 - g) Schedules
 - h) Forms/Formats
- 2) I/We hereby tender for the entire consulting services for the works referred to in the documents mentioned in contract documents upon the terms and conditions contained or referred to in the aforesaid documents.
- 3) I/We agree to keep this tender open for acceptance for 120 days from the date of opening thereof and also agree not to make any modification in the terms and conditions on our own accord.
- 4) As sum of **Rs. _____ (Rupees _____)** is hereby forwarded as demand draft/bank guarantee from schedule bank in favour of WAPCOS Ltd. Payable at Gurugram, as earnest money/bid security. I/We agree that if I/We fail to keep the validity of tender open as aforesaid, or make any modification in the terms and conditions of my/our tender on our accord and/or after the acceptance of our tender if I/We fail to commence the execution of the works as provided in the documents referred to in paragraph 1 above. I/We shall become liable for forfeiture of my/our earnest money as aforesaid and the corporation project shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. If this tender is accepted, I/We agree to abide by and fulfil all the terms, conditions, and provisions contained in the above-mentioned tender documents.

Thanking you,

Date:

(Signature and Stamp

Place:

of the Authorized signatory)

ANNEXURE -VII

**Declaration by Bidder
(On Bidder's Letter Head)**

This is to certify that We, M/s....., in submission of this offer confirm that:-

We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. We have carefully gone through each & every section of the tender document for the work **"Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar"**.

- 1) Our tender is offered taking due consideration of all factors mentioned in tender documents.
- 2) We promise to abide by all the stipulations of the Contract documents and carry out and complete the work to the satisfaction of the Employer/ Principal Employer.
- 3) We also agree to procure Plants and Machineries at our cost required for the work. We also submit that we have Organizational Structure comprising adequate Technical Personnel in the line of requirement. We also agree to accomplish the job entrusted to us in the stipulated time laid out in document except situations not under our control.
- 4) We have not made any misleading or false representation in the forms, statement and attachments in proof of the qualification requirements;
- 5) We do not have records of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion or financial failures etc.
- 6) We have submitted all the supporting documents and furnished the relevant details as per prescribed format.
- 7) We are financially sound and have not applied or be under corporate debt restructuring.
- 8) List of similar works satisfying qualification criterion as indicated hereinafter, does not include any work which has been carried out by us through a Subcontractor on a back-to-back basis.
- 9) The cost has been quoted by me/us for bid after taking into consideration all the terms and conditions stated in the tender document, our own estimates of costs and after a careful assessment of the site and all own the conditions that may affect the project cost and implementation of the project.
- 10) I/We shall keep this offer valid as period specified in the NIT.
- 11) I/We hereby submit our FINANCIAL BID and offer cost for undertaking the aforesaid project in accordance with the bidding documents and the agreement.
- 12) In the event of my/our being declared as the selected bidder, I/we agree to enter into a agreement in accordance with the format of contract agreement. We agree not to seek any changes in the aforesaid format of contract agreement and agree to abide by the same.

Certificate:

It is certified that the information given in the enclosed bid are correct. It is also certified that I/we shall be liable to be debarred, disqualified/cancellation of enlistment in case any information furnished by me/us found to be incorrect.

Date:**(Signature and Stamp****Place:****of the Authorized signatory)**

Annexure – VIII

FORMAT FOR LETTER AND INTEGRITY PACT

[To be submitted on Bidder's **Original** Letter Head]

To,

WAPCOS Limited, 76-C,
Sector 18, Institutional
Area, Gurugram,
Haryana-122015

Sub: Integrity Pact for

Dear Sir,

I/We acknowledge that WAPCOS is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document at **Enclosure-I**.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by WAPCOS. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, WAPCOS shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully,

Date:

Place:

(Signature and Stamp

of the Authorized signatory)

Enclosure-I

INTEGRITY PACT

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of WAPCOS Limited

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of 20.....

BETWEEN

_____ represented through,, (Name of Division),
....., (Hereinafter referred as the (Address of Division)
'Purchaser/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

..... (Name and Address of the
Individual/firm/Company) through (Hereinafter referred to as the
(Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Purchaser/Owner has floated the Tender (NIT No.) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for **Supply, Installation and Commissioning of Digital Water Level Recorder (DWLR) with Telemetry System in Muzaffarpur and Samastipur Districts of Bihar.** hereinafter referred to as the "Contract".

AND WHEREAS the Purchaser/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Purchaser/Owner

- 1) The Purchaser/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Purchaser/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Purchaser/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Purchaser/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - (c) The Purchaser/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Purchaser/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Purchaser/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Purchaser/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Purchaser/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
 - e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
 - 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a wilful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**
 - 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Purchaser/Owner under law or the Contract or its established policies and laid down procedures, the Purchaser/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Purchaser/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Purchaser/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Purchaser/Owner. **Such exclusion may be forever or for a limited period as decided by the Purchaser/Owner.**
- 2) **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If the Purchaser/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Purchaser/Owner apart from exercising any legal rights that may have accrued to the Purchaser/Owner, may in its considered opinion forfeit the entire

amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

- 3) **Criminal Liability:** If the Purchaser/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Purchaser/Owner has substantive suspicion in this regard, the Purchaser/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Purchaser/Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Purchaser/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
- 2) The Purchaser/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Purchaser/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Purchaser/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion and handover to the WAPCOS, CGWB and State Govt. Department of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority.

Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Headquarters of the Division** of the Purchaser/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Purchaser in accordance with this **Integrity Agreement/Pact or interpretation thereof shall not be subject to arbitration.**

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of Purchaser/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.
(signature, name and address)
2.
(signature, name and address)

Place:

Dated:

CHECKLIST**A. DOCUMENTS FOR TECHNICAL QUALIFICATION**

(Please ensure that you have serially numbered each and every page of scanned documents forming your bid and furnished following documents in the manner prescribed mentioning the page number(s) of your bid in appropriate box)

This Checklist should be the first document of your bid numbered as page 1.

Sr. No.	Particular of Documents	Reference Page No(s) where the documents are uploaded, Page Nos.
1	Authority to Sign the Tender a) In case of proprietary firm, the Proprietor shall sign with full name, current address OR by the authorized person holding Notarized Power of Attorney issued by the Proprietor for signing of business proposal. The Power of Attorney shall be submitted in original and shall be specific to this Bid submission only and mentioning the name of the work/project. b) In case of a Limited Company or Corporation, the Application shall be signed by an authorized person holding the Power of Attorney for signing of business proposal. A certified copy of the Power of Attorney shall accompany the Application. Note: Powers of Attorney duly notarized and on a stamp paper of appropriate value, issued for signing the tender documents, make corrections/modifications, to interact with the Employer and act as the contact person, shall be submitted along with Technical Bid.	
2	Scanned copy of EMD Documents	
3	Scanned copy of Tender Fees Documents	
4	Tender Form-Letter of Transmittal for Technical Bid	
5	Form of Bid-Letter of Transmittal for Financial Bid	
6	Declaration By Bidder	
7	EPF Registration: The bidder should have EPF registration.	
8	1.2.1 Bidder should have registered for GST (Goods & Service Tax) and provide GSTIN certificate for the State where work is to be executed and PAN Card. If not registered till date of submission of bid, bidder will give an undertaking on bidder letter head stating that they will get registered in GST as per Govt. norms before submitting of 1st bill of executed works.	

9	1.2.2 The Bidder should be approved and eligible registered contractors of C.P.W.D(B&R/Civil/Drilling/Equipments)/State P.W.D (Buildings and Roads wing/Equipments)/Railways /M.E.S or any other Government Department/Organisation and tendering limit of bidder should be more than the estimated cost of bid for execution of DWLR work. Copy of Certificate of Incorporation/ Registration/Partnership Deed Registration or any other relevant document, as applicable, should be submitted along with a copy of address proof. The bidder will submit Name, address, details of the organization, Name(s) of the Owner/partners/promoters and Directors of the firm/company as prescribed in Form-B1. The bidder should have EPF registration.	
10	1.2.3 The work completion certificate should mention the details of work executed and the date of completion of the work in the last seven year and in hand should be certified by an officer not below the rank of First-class officers or equivalent. The work completion certificate should be as per standard format. The work experience certificate should carry e-mail ID and postal address of the issuing authority.	

11	1.2.4 The bidder must have experience of successfully completed similar works during last 07 years ending previous day of last date of submission of Tenders: Three (03) similar completed works each costing not less than the amount equal to 40% of the estimated cost put to tender. Or Two (02) similar completed works each costing not less than the amount equal to 50% of the estimated cost put to tender. Or One (01) similar completed work costing not less than the amount equal to 80% of the estimated cost put to tender Definition of Similar Nature of Work: Works related to Supply, Installation, Commissioning and Operation & Maintenance of Digital Water Level Recorder (DWLR) with Telemetry System. The value of the work done declared is to be without GST/Taxes. For the works, where the Taxes or GST is not clearly defined, the value of works shall be considered as including GST and GST @12% shall be deducted for the works completed up to 31.12.2021 and GST @18% shall be deducted for the works completed after 01.01.2022 to establish the value of work done. The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 07% per annum; calculated from the date of completion to previous day of last date of submission of tenders. The past experience in similar nature of work should be supported by certificates issued by the Client's Department/Organization. In case, the works/certificates are not verified by the issuing authority, WAPCOS reserves the right to not consider for the award of works. Verification should be done from the official email id of issuing Authorities. The bidder will provide official e-mail, Landline number of the Issuing Authorities in prescribed Form-C(c) with undertaking. Bidder will ensure the email ids and landline are in working condition. If certificates are not verified by the issuing authority, then it may not be considered for technical evaluation.	
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12	1.2.5	The average annual financial turnover of the bidder from DWLR/Equipments works during the immediate last consecutive three years shall not be less than 50% of the estimated cost ending 31 st March 2026. Year in which no turnover is shown would also be considered for working out the average. The turnover, profit, net worth (positive during the last financial year 2025-26) certificates for last five financial years (2021-22 to 2025-26) are to be submitted and must be certified by the statutory auditor of the firm/company. Any such certificate must carry the UDIN (Unique Document Identification	
13	1.2.6	The bidder should not have incurred any loss (profit after tax should be positive) in more than two year during available last five consecutive Balance Sheets, duly certified and audited by the chartered accountant. Bidder shall attach balance sheet and profit & loss statement in support of Form-A1 Note: This certificates will be verified through ICAI Portal using UDIN number mentioned in Form-A1 There is no need to upload entire voluminous balance sheet. However, summarized balance sheet (audited) and summarized profit & loss account (audited) for last 05 years shall be uploaded.	
14	1.2.7	The bidder should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Accordingly, Bidder shall submit Bank Solvency Certificate issued from a Nationalized/Scheduled Commercial Bank approved by Reserve Bank of India (RBI) for a sum of at least 40% of the estimated cost of the work. The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana specific to this Bid submission only and mentioning the name of the work/project. The certificate shall be submitted in original and the colour/b&w copy/scanned copy shall not be accepted. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate. In case of MSME bidders, a Banker's Certificate indicating general worthiness or Credit Line/Sanction Letter from Scheduled/Nationalized Bank as applicable may be provided. Verification should be done from the official email id of issuing Authorities. The bidder will provide official e-mail, Landline number of the Issuing Authorities in prescribed Form with undertaking. Bidder will ensure the email ids and landline are in working condition. If Certificate is not verified by the issuing authority, then it may not be considered for technical evaluation.	

- 15 1.2.8 The bidder shall have sufficient construction equipment's, field testing equipment/machinery and skilled dedicated service Engineer cum operator & manpower to carry out the works and shall submit details along with documentary proof of such machinery and manpower, which he proposes to deploy.

Table-II

Manpower (Regular)	Minimum Required Nos.
Skilled Dedicated Service Engineer cum Operator (Post Graduate/Graduate- minimum 10 years of experience)	2

Minimum Manpower as stated above should be arranged by the bidder and in addition to above, the bidder shall, as and when required, deploy additional manpower, machinery, equipment, and other resources at the site to meet the project requirements and ensure completion of the work within the stipulated contract period. The bidder will submit "undertaking for manpower and machineries/equipments deployment" as prescribed in **Form-E**.

If bidder failed to deploy manpower and machineries/equipments within mobilisation period as mentioned in the tender documents, WAPCOS is free to terminate the contract at any time & forfeit the Bank Guarantee and blacklist the bidder.

16	1.2.9	The Bidder should give an undertaking that they will supply DWLR as a reputed DWLR OEM/Authorized supplier only and clearly mentioning the numbers of DWLR to be supplied by each OEM/authorized supplier as per specifications of DWLRs mentioned in the Tender Document.	
17	1.2.10	Bidder will be required to deploy at least 02 (two) dedicated Service Engineer cum operator at the Regional office Data Centre for Operation of DWLR system and ensure seamless data transfer from remote DWLR stations to RODC through FTP, then to NDC and WRIS/WIMS server through API. The undertakings for employment of this ground water professional are to be given. The bidder should have after sales support in the region (within a Jurisdiction of state where) for Digital Water Level Recorders stations with GSM/GPRS based telemetry. If bidder does not have any after sales support within a Jurisdiction of state where at the time of bidding, he shall be required to establish the same before after successful award of contract. The undertaking regarding this is to be given. The bidder shall submit the product brochure/literature, compliance statement duly signed by the bidder and other supporting document if any to establish the claim that the offered equipment meets the technical specifications provided in tender document. If there is any deviation in specification it should be mentioned in separate column of compliance statement.	
18	1.2.11	The blacklisting policy of the company is available on official website of WAPCOS Limited. The bidder/tenderer/consultant/contractors have to mandatorily furnish an undertaking addressing the same to Engineer-in-Charge in the form of certificate to abide the contents of blacklisting policy. The format of undertaking is provided at Form-H . Any action in violation of the blacklisting policy or to the certificate furnished shall result in cancellation of tender at the stage before or after the award of work.	
19	1.2.12	Bid Capacity as prescribed in Form-D. The bidder should possess the bidding capacity as calculated by the specified formula. The formula generally used is: Available bid capacity = $A \times 1.5 \times N - B$, where A=Maximum value of DWLR (similar nature of work as defined and relevant to work being procured) works executed in any one year during the last five years (updated at the current price level), taking into account the completed as well as works in progress. N=Number of years prescribed for completion of the work in question. B=Value (updated at the current price level) of the existing commitments and ongoing works to be completed in the next 'N' years.	

20	All Forms-A to M (As applicable)	
21	All Schedules-1 to 8 (As applicable)	
22	All Annexures-I to VIII (As applicable)	
B	Cover 2 (Price Bid)	In the BOQ template Online

Date:**(Signature and Stamp****Place:****of the Authorized signatory)****Note:**

The bidders should put serial numbers on all the pages as per checklist before uploading on the portal. Bidders will be responsible if their bid becomes non-responsive due to submission without page numbers as per checklist.



WAPCOS LIMITED
(A Government of India Undertaking)
Ministry of Jal Shakti, Department of River Development & Ganga
Rejuvenation, Government of India

e-TENDER FOR

**SUPPLY, INSTALLATION AND COMMISSIONING OF DIGITAL WATER LEVEL
RECORDER (DWLR) WITH TELEMENTRY SYSTEM IN MUZAFFARPUR AND
SAMASTIPUR DISTRICTS OF BIHAR**

NIT NO: WAP/WR&WS-GWRD&M/ARS/BIHAR/AUG/2026-2027/03

(VOLUME-I: TECHNICAL BID)

(VOLUME-II: FINANCIAL BID)

WAPCOS LTD.

76-C, Institutional Area,
Sector-18, Gurugram,
Haryana – 122015
E-mail: gwrldm@wapcos.co.in
Website: www.wapcos.gov.in

August, 2026

BILL OF QUANTITIES

CONTENT

- I. PREAMBLE**
- II PRICED BILL OF QUANTITIES**

BILL OF QUANTITIES

PREAMBLE

- i. The Bill of Quantities for quoting rates shall be read in conjunction with the Instructions for Bidders, General Conditions of Contract and Special Conditions, Technical Specifications, Forms, Schedules, Annexures, Supplementary Information and Tender Drawings.
- ii. The quantities given in the Bill of Quantities are approximate and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as jointly measured by the Contractor and the Engineer-in-Charge and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer-in-Charge may fix within the terms of the Contract.
- iii. The rates and prices quoted/tendered in the priced bill of quantities except insofar as it is otherwise provided under the Contract, include all constructional plant & equipment, labour, supervision, materials, all temporary works and false works, erection, maintenance, establishment and overhead charges profit, taxation, levies, local levies and other charges together with all general risks, liabilities and obligations except GST set out or implied in the Contract and including remedy of any defects during the Maintenance Period.
- iv. The rates and prices shall be quoted entirely in Indian Currency, the rates and amount of each item will be entered in appropriate column.
- v. The rate or price shall be entered against each item in the Bill of Quantities both in figures and words, whether quantities are stated or not. Rates for all items shall be quoted. Omission of quoting rates for any item shall render the bid liable to rejection being incomplete.
- vi. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the price Bill of Quantities.
- vii. The method of measurement of completed work for payment shall be in accordance with the standard practice and requirements as stated in the relevant section of the conditions of the contract.
- viii. Errors will be corrected by the Employer for any arithmetical inaccuracy pursuant to relevant Clause of the Instruction to Bidders. Non-acceptance of such correct figures/amounts shall render the bid liable for rejection.
- ix. Tender rates for each item of work provided in the bill of quantities shall be submitted only on printed bill of quantities enclosed herewith without adding any alternative or condition of any sort.
- x. In the item rate tender, only item rate quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected
- xi. Unit rates/item rates quoted must be realistic. Any rate appearing unrealistic shall render the tender as unbalanced and liable to be disqualified.

- xii. All rates shall be quoted on the tender form only in the columns provided. The amount for each item shall be worked out and requisite total given. Special care shall be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. Total Amount should be written in figures and in words, both.
- xiii. The description given in the BOQ shall unless otherwise stated be held to include wastage in execution, carriage, cartage and return of empties, hoisting, setting, fitting and fixing in positions and all other labors necessary in and for the full and entire execution and completion of work as aforesaid in accordance with good practice and recognized principle.
- xiv. Recording of measurement of any item of work in the measurement book and/or its payment in the interim on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the Contractor from liabilities from any over measurement or defects noticed till completion of the maintenance period.
- xv. Any operation incidental or contemplated and necessary for proper execution of items quoted in Bill of Quantities shall be deemed to be included in the rates quoted. Nothing extra shall be admissible for such operations.

Item Rate BoQ

Tender Inviting Authority: WAPCOS Ltd. (A Government of India Undertaking) Under Ministry of Jal Shakti, Government of India

NAME OF WORK: SUPPLY, INSTALLATION AND COMMISSIONING OF 09 NOS. DIGITAL WATER LEVEL RECORDER (DWLR) WITH TELEMETRY SYSTEM & OPERATION AND MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS OF CONTINUOUS REAL TIME DATA GENERATION FROM THE DATE OF COMMISSIONING OF THE RESPECTIVE DWLRs IN MUZAFFARPUR AND SAMASTIPUR DISTRICT OF BIHAR STATE (SOFT ROCK UPTO 80M)

Contract No: WAPWR&WS-GWRD&M/ARS/BIHAR/JULY/2026-2027/03

Name of the Bidder/ Bidding Firm / Company :						
PRICE SCHEDULE (This BOQ template must not be modified/replaced by the bidder and the same should be updated after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. Excluding GST	TOTAL AMOUNT Without Taxes in Rs. Excluding GST	TOTAL AMOUNT in Words
1	2	4	5	13	53	55
1	Supply, Installation, Commissioning of DWLRs and telemetry, establishment of Data Acquisition system & its maintenance for Real Time Ground Water Level monitoring and supply of Ground water level, ground water temperature along with groundwater quality (EC data) data from select station from site and receipt of data at concerned Regional Office Data Centre (RODC) and subsequently to National Data Center of CGWB at Faridabad in a desired format from 09 Piezometers wells) in the state of Bihar through telemetry systems with operation and maintenance for a period of five (5) years of continuous real time data generation from the date of commissioning of the respective DWLRs. (RODC at CGWB, MER, Patna, Bihar)					
1.1	Without Quality Probe: Supply, Installation, testing, commissioning, training for Digital Water Level Recorders (DWLRs) with non-vented hydrostatic pressure type sensor and barometric pressure correction and, with temperature sensor for individual station with desired measurement range and standard sensor cable along with junction boxes and 5 meter signal cable, to be installed at depth as per list and necessary accessories with battery operated data logger and telemetry System based on GSM & GPRS as per the technical specifications (As per the tender document) to be installed at designated locations as per list in tender document. This includes 05 years comprehensive warranty and O&M which also includes replacement of batteries as & when required, replacement of spares/parts/equipments/consumables, periodic inspections, repairing/service charges, the cost of Communication using GSM & GPRS SIM and other related charges. Minimum One Service Engineer shall be placed at concerned RODC for Operation of DWLR system with Telemetry. This is a Continuous activity for five years after successful commissioning and final acceptance certificate of DWLR. This also include Training of the purchaser's personnel by the supplier on assembly, startup, operation, maintenance and/or repair of DWLR with telemetry and relevant software and supplied goods Two types of trainings are to be organised. (i) Onsite training to be organised in each State where DWLRs are to be installed. One onsite trainings for each State (ii) Training at concerned Regional Office Data Center (RODC) of CGWB Two trainings at concerned RODC. Course topics will include sensor calibration, data logger configuration, data downloading, data retrieval, collection, Trouble shooting, processing maintenance requirements and procedure for equipment configuration, installation, site testing and commissioning including training kit containing course material in soft and hard copies as per technical specification. Note: For Validation of data, Physical measurement shall be cross checked with the data generated from DWLR.	6	Nos		0.00	INR Zero Only
1.2	With Quality Probe: Supply, Installation, testing, commissioning, training for Digital Water Level Recorders (DWLRs) with non-vented hydrostatic pressure type sensor and barometric pressure correction and, with temperature sensor and with electrical conductivity for individual station with desired measurement range and standard sensor cable along with junction boxes and 5 meter signal cable, to be installed at depth as per list and necessary accessories with battery operated data logger and telemetry System based on GSM & GPRS as per the technical specifications (As per the tender document) to be installed at designated locations as per list in tender document. This includes 05 years comprehensive warranty and O&M which also includes replacement of batteries as & when required, replacement of spares/parts/equipments/consumables, periodic inspections, repairing/service charges, the cost of Communication using GSM & GPRS SIM and other related charges. Minimum One Service Engineer shall be placed at concerned RODC for Operation of DWLR system with Telemetry. This is a Continuous activity for five years after successful commissioning and final acceptance certificate of DWLR. Physical measurement shall be cross checked with the data generated from DWLR. This also include Training of the purchaser's personnel by the supplier on assembly, startup, operation, maintenance and/or repair of DWLR with telemetry and relevant software and supplied goods Two types of trainings are to be organised. (i) Onsite training to be organised in each State where DWLRs are to be installed. One onsite trainings for each State (ii) Training at concerned Regional Office Data Center (RODC) of CGWB Two trainings at concerned RODC. Course topics will include sensor calibration, data logger configuration, data downloading, data retrieval, collection, Trouble shooting, processing maintenance requirements and procedure for equipment configuration, installation, site testing and commissioning including training kit containing course material in soft and hard copies as per technical specification. Note: For Validation of data Physical measurement shall be cross checked with the data generated from DWLR.	3	Nos		0.00	INR Zero Only
2	Server of reputed brand with accessories, work station and 3 KVA online UPS as per tender document. (One set up to be created at the concerned RODC and one at NDC Faridabad)	2	Nos		0.00	INR Zero Only
3	IT hardware which includes required static IP, router, switch, firewall system & A3 size color printer.	2	Nos		0.00	INR Zero Only
4	42" LED Display system as per technical specifications	2	Nos		0.00	INR Zero Only
5	High Speed Internet Connection (minimum 8 mbps upload and 8 mbps download) for five years	2	Nos		0.00	INR Zero Only
6	GSM & GPRS data receiving system with all ancillary equipment as per technical specifications.	2	Nos		0.00	INR Zero Only
7	Installation, Testing and Commissioning of Server along with monitor, Computer node (Workstation) and 3 KVA online UPS as per technical specifications	2	Nos		0.00	INR Zero Only
8	Installation, Testing & commissioning of IT hardware which includes required static IP, router, switch, firewall system & A3 Size Color Printer.	2	Nos		0.00	INR Zero Only
9	Installation, Testing & commissioning of 42" LED Display system as per technical specifications.	2	Nos		0.00	INR Zero Only
10	Installation, Testing & commissioning & charges of High Speed Internet Connection (minimum 8 mbps upload and 8 mbps download) for 5 years	2	Nos		0.00	INR Zero Only
11	Installation, Testing & commissioning GSM & GPRS data receiving system with all ancillary equipment as per technical specifications.	2	Nos		0.00	INR Zero Only
12	Comprehensive operation and maintenance (O&M) for a period of five (5) years of continuous real time data generation from the date of commissioning of the respective DWLRs. This includes the replacement of batteries as and when required, replacement of spares/parts/equipments/consumables, periodic inspections, repairing/service charges, the cost of communication using GSM & GPRS, SIM and High Speed Internet charges and other related charges. Note: Continuous activity for five years comprehensive O&M and warranty period from the date of commissioning of the respective DWLRs shall be covered.	60	Months		0.00	INR Zero Only
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				