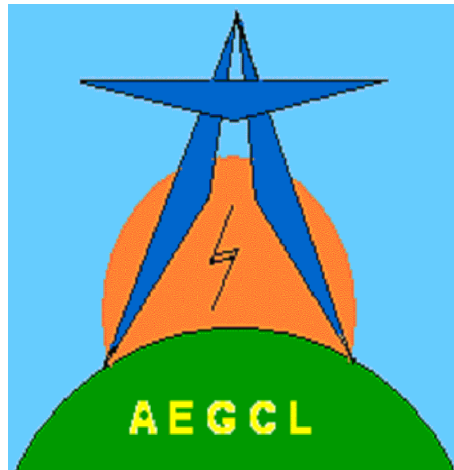


ASSAM ELECTRICITY GRID CORPORATION LIMITED
Regd. Office: 1st Floor, Bijulee Bhawan, Paltan Bazar, Guwahati-781001
CIN:U40101AS2003SGC007238
Ph:-0361-2739520/Fax:-0361-2739513 Web: www.aegcl.co.in



TENDER DOCUMENT

Name of Work: - 1. Replacement of water supply service pipeline with new pipes (CPVC) alongwith some bibcock at ASEB Colony, Kahilipara, Ghy-19
2. Construction of 9 No.s of staging along with supplying, fitting & fixing of 34 No.s of HDPE Over-head water tank for Assam Type Quarter (Type-V & VI) at ASEB Colony, Kahilipara, Guwahati-19

NIT No.: AEGCL/DGM(Civil)/2023-24/01 dtd: 16.10.2023

For and on behalf of the Managing Director, Assam Electricity Grid Corporation Limited (AEGCL), the Chief General Manager (O&M), LAR invites e-tender from reputed Civil Engineering Firms / Contractors for the work –

1. Replacement of water supply service pipeline with new pipes (CPVC) alongwith some bibcock at ASEB Colony, Kahilipara, Ghy-19

2. Construction of 9 No.s of staging along with supplying, fitting & fixing of 34 No.s of HDPE Over-head water tank for Assam Type Quarter (Type-V & VI) at ASEB Colony, Kahilipara, Guwahati-19.

A single stage two envelope procedure (Techno-Commercial and Price Bid) will be adopted for this tender.

(A)3. INFORMATION TO BIDDER: -

1. NAME OF WORK:

1. Replacement of water supply service pipeline with new pipes (CPVC) alongwith some bibcock at ASEB Colony, Kahilipara, Ghy-19

2. Construction of 9 No.s of staging along with supplying, fitting & fixing of 34 No.s of HDPE Over-head water tank for Assam Type Quarter (Type-V & VI) at ASEB Colony, Kahilipara, Guwahati-19

2. LOCATION OF WORK: - ASEB Colony, Kahilipara, Guwahati-19

3. CONTACT ADDRESS: -

O/o the DGM (Civil),
AEGCL, Ground Floor,
Bijulee Bhawan, Paltanbazar,
Guwahati-781001.

Email id- dgm.civil@aegcl.co.in

4. BIDDING PROCEDURE: -

- a) The bidders must register themselves at <https://assamtenders.gov.in> as per the guidelines laid in the website.
- b) The bidders have to submit scanned copies of the relevant documents through the e-Tender Portal.
- c) The bid must be submitted online through e-tendering portal <https://assamtenders.gov.in>.
- d) Bidders may obtain further information from the office of the Deputy General Manager (Civil), AEGCL, Bijulee Bhawan, Paltan Bazar, Guwahati - 781001, Assam [e-mail: dgm.civil@aegcl.co.in ; Web site: www.aegcl.co.in.
- e) To participate in the tender the interested bidders may visit <https://assamtenders.gov.in> for all the relevant documents and information required to participate in the tender.

5. I. BASIC DETAILS:

- a) Tender No.: AEGCL/DGM(Civil)/2023-24/01
dtd: 16.10.2023
- b) Tender Details/ Name of work:
 1. Replacement of water supply service pipeline with new pipes (CPVC) alongwith some bibcock at ASEB Colony, Kahilipara, Ghy-19
 2. Construction of 9 No.s of staging along with supplying, fitting & fixing of 34 No.s of HDPE Over-head water tank for Assam Type

- Quarter (Type-V & VI) at ASEB Colony, Kahilipara, Guwahati-19 Civil Works
- c) Work Type:
- d) Tender Inviting Authority:
- (i) Designation: Chief General Manager (O&M), LAR
- (ii) Address: Bijulee Bhawan, Paltan Bazar, Guwahati, Assam.
- e) Total Tender Value: **Rs. 26,22,372.00** (excluding GST)

II. CRITICAL DATES:

Tender Start Date **18.10.2023 1400 Hrs 00 Mins**
 Submission Start Date **25.10.2023 1400 Hrs 00 Mins**
 Tender End Date **07.11.2023 1400 Hrs 00 Mins**
 Opening Date of Techno Commercial bid **08.11.2023 1500 Hrs 00 Mins**

6. TENDER VALUE:

The tender value *exclusive of all taxes* is **Rs. 26,22,372.00** (Rupees Twenty Six Lakhs Twenty Two Thousand Three Hundred Seventy Two) only.

7. TENDER PROCESSING FEE AND MODE OF PAYMENT: -

The Bidder shall bear all costs associated with the preparation and submission of its Bid, AEGCL shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

Bidder has to pay Non-Refundable tender processing fee of **Rs.620.00 (Rupees Six Hundred Twenty)** only via e-tender portal www.assamtenders.gov.in.

8. BID SECURITY/EARNEST MONEY AND MODE OF PAYMENT: -

- a) For participation in bidding procedure, participants must compulsorily pay the Bid Security of **Rs.61,890.00 (Rupees Sixty One Thousand Eight Hundred Ninety)** only via e-tender portal www.assamtenders.gov.in.
- b) The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- c) The bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security.
- d) The bid security may be forfeited: -
- (i) if a Bidder withdraws its bid during the period of bid validity period.
- (ii) if the successful Bidder fails to sign the Contract within the specified period.
- (iii) if the successful Bidder fails to furnish a performance security within 7 (Seven) days' time of issue of Letter of Intent (LOI).

9. PERFORMANCE GUARANTEE AND MODE OF PAYMENT: -

- a) The materials and entire work are to be guaranteed against defective design, materials and workmanship and for satisfactory performance for a period of 18 (eighteen) Months from the date of final acceptance of the completed work by AEGCL.
- b) The successful Bidder shall have to deposit through a **Bank Guarantee/Fixed deposit/RTGS/NEFT** from a Nationalized or scheduled Bank of RBI in AEGCL's standard proforma on non-judicial stamp of appropriate value for an amount equivalent to 10% (ten percent) of the total value of the order including GST as performance security within 7(seven) days from receiving of letter of intent(LOI) or duly pledged in favour of the Purchaser concerned (AEGCL) and such security deposit shall be **valid up to 870 days from the date of Issue of Letter of Intent(LOI)**. In case of Abnormally Low Bid the amount to be taken as performance guarantee will be as per bid document.

- c) If the contractor/firm fails or neglects to observe and perform any of his obligations under the contract, Purchaser (AEGCL) shall have the right to forfeit either in full or in part at his absolute discretion, the security deposit furnished by the contractor/firm.
- d) If the value of the work increases from original ordered value, the contractor has to provide performance guarantee for additional amount
- e) If any abnormally low bid is accepted under Clause no. (B) 5.B., after taking the additional performance security as per the assessment of the committee, however, the total performance security should not have to be exceeded 20% of the total contract value.
- f) The additional performance security shall be treated as the part of the original performance security and shall be valid for a period coextensive with the applicable defect liability period of the contract.
- g) Non submission of the additional performance security shall constitute sufficient ground to rejection of the bid and similar assessment shall be initiated for next ranked bidder if that bidder is identified as ALB.
- h) No interest shall be payable on such deposits.

10. CLARIFICATIONS: -

- a) A prospective Bidder requiring any clarification of the Bidding Document shall contact the AEGCL in writing their enquiries during Pre-bid meeting. AEGCL will respond to any request for clarification if deemed necessary. Should AEGCL deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so.
- b) The Bidder is advised to visit and examine the site where the work is to be Carried out and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense.
- c) The Bidder and any of its personnel or representatives will be granted permission by AEGCL to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder and its personnel will release and indemnify the Employer and its personnel from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

11. VALIDITY OF BID: -

- a) Bid shall remain valid for the period of **180 days** after the submission deadline date prescribed by AEGCL. In exceptional circumstances, prior to the expiration of the Bid validity period, AEGCL may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing.

12. TIME OF COMPLETION: -

- a) The allotted time of completion for the work is **270 days** from the handing over of the site.

13. DISCLAIMER: -

- a) AEGCL is not committed contractually in any way to those Bidders whose Bid are accepted. The issue of this Bid does not commit or otherwise oblige AEGCL to proceed with any part or steps of the process.

14. AMENDMENT OF TENDER DOCUMENT: -

- a) At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addendum.

- b) To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, AEGCL may, at its discretion, extend the deadline for the submission of bids.
- 15. LANGUAGE OF BID: -**
- a) The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and AEGCL, shall be written in the English and/or Assamese language.
- 16. NEGOTIATION WITH BIDDER: -**
- The AEGCL reserve the right to hold negotiations with lowest bidder if AEGCL feels the quoted rates of particular item(s) are unreasonably high. The bid must be valid, eligible and technically acceptable and considered for award of contract.
- 17. VERIFICATION OF DOCUMENTS: -**
- a) AEGCL reserves the right to verify the documents submitted by the bidders with issuing authority and if any abnormalities are observed in the same, their bids will be rejected.
- 18. RIGHT TO REJECT: -**
- a) The AEGCL reserves the right to reject any or all the bids without assigning any reason thereof and the AEGCL further reserves the right to split up the work order in favour of more than one Contractor. The AEGCL also reserves the right to reject the lowest or any other price without assigning any reason. The clauses which are not appearing in this Bid document will be as per The General Condition of Supply and Erection 2009 of AEGCL. The General Condition of Supply and Erection 2009 of AEGCL is available in the AEGCL's website www.aegcl.co.in
- (B) ELIGIBILITY QUALIFICATION:**
- i. The Techno-Commercial Evaluation will be done on the basis of technical qualification, Financial qualifications and fulfilment of the legal conditions.
 - ii. The Price Bid of only Responsive Techno-Commercial Bidders will be opened and intimation will be issued in due course.
- 1. ELIGIBLE BIDDERS: -**
- a) A Bidder may be a person, partnership, private entity or a government-owned entity.
 - b) A Bidder, and all partners constituting the Bidder, shall have Indian nationality.
 - c) In the case of the Joint Venture (JV): -
 - (i) When the bidder is a Joint Venture (JV) of two or more firms as partners, all partners shall be jointly and severally liable. The JV shall legally authorize one of the partners as the lead partner for the purpose of submitting the bid, incur liabilities; receive payments and instructions on behalf of the others. A copy of the **registered** JV agreement, executed on Non judicial stamp paper, shall be submitted with the bid. However, in case of successful bid, the agreement shall be signed by all the partners, so as to be legally binding on all the partners.
 - (ii) The lead partner must fulfil 40percent of the qualifying criteria.
 - (iii) The other partner must fulfil individually not below the 20percent of the qualifying criteria.
 - d) Consequently, all Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:-
 - they have controlling partners in common; or
 - they receive or have received any direct or indirect subsidy from any of them; or
 - they have the same legal representative for purposes of this bid; or
 - they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or

- e) If a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved.
- f) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the plant and services that are the subject of the bid.
- g) A firm that is under a declaration of ineligibility by the AEGCL or any Government Entity or PSU at the date of the deadline for bid submission or thereafter i.e., on or before contract signing date shall be disqualified.
- h) Bidders shall provide such evidence of their continued eligibility satisfactory to the AEGCL, as the Employer shall reasonably request.
- i) In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- j) The bidder must have experience of execution of work of similar nature previously. The bidder must submit experience and Performance Certificate for scrutiny by AEGCL.
- k) **A person, Firm or any other prospective bidder who is involved in fraud, unethical practices or barred from submitting bids by AEGCL or any sister concerns of AEGCL i.e. APDCL & APGCL will not be allowed to participate in the bids. If such cases are detected after submission of the bids, in later stages of the bidding process, then such bids will be rejected outright.**

2. LEGAL ENTITY:-

- a) Verification may be undertaken to verify that an applicant is a bona-fide registered company or business. Bidders are required to provide evidence of the legal entity by providing a copy of an official document as mentioned in the appendix attached along with this bid document.

3. TECHNICAL QUALIFICATION: -

- a) Experience having completed similar works during the last 7 years ending last day of the month previous to the one in which applications are invited should be either of the following:
 - i. **Three similar completed works** each costing not less than the amount equal to **Rs. 12,37,760.00** (Rupees Twelve lakhs Thirty Seven Thousand Seven Hundred Sixty) only
 - or
 - ii. **Two similar completed works** each costing not less than the amount equal to **Rs. 15,47,200.00** (Rupees Fifteen Lakhs Forty Seven Thousand Two Hundred) only.
 - or
 - iii. **One similar completed work** costing not less than the amount equal to **Rs. 24,75,519.00** (Rupees Twenty Four Lakhs Seventy Five Thousand Five Hundred Nineteen) only.

Note: "Similar work" is defined as **Civil Works** complete in all aspects for Govt. Department or PSUs only.

- iv. If the nature of work and value differs from the above stated conditions, it will not be considered while evaluation of technical qualification.
- v. Work order along with completion certificate are to be attached.
- b) Bidders must compulsorily submit work order and work completion certificate issued from Govt Department/reputed PSUs only satisfying the above-mentioned work experience criteria for technical qualification. Moreover, AEGCL reserves the right to scrutinise any work order/work completion certificate submitted by the bidders

with issuing authority and if any abnormalities are observed in the same, their bids will be rejected.

4. FINANCIAL QUALIFICATION: -

- a) Minimum average annual turnover of **Rs. 9,28,320.00** (Rupees Nine Lakhs Twenty Eight Thousand Three Hundred Twenty) only calculated as total certified payments received for contracts in progress or completed, within the last 3 (Three) years.
- b) The Contractor must furnish their Bank Solvency Certificate indicating the amount by concerned authority in necessary format as per their banks.
- c) Financial Statements for last 5(five) years out of which best 3 (three) years financial statement will be considered for calculation of turnover (should be CA/CMA certified).

5. PRICE BID EVALUATION PROCESS:

Identification:

- A. The following methodology will be practised for identification and treatment of the Abnormally Low Bids (ALB) in this tender process of AEGCL:
 - (i) **Absolute Approach** is to be considered when there is fewer than five substantially responsive bidders and if the bid price is 20% or more below AEGCL's cost estimate then AEGCL's tender evaluation committee should clarify the Bid price with the bidder to determine whether the Bid is abnormally low.
 - (ii) **Relative approach** is to be considered when there are at least 5(five) nos. of substantially responsive bids and the lowest bid price is 20% or more below AEGCL's cost estimate.

In this approach, first the Average bid price is determined and then by deducting the standard deviation from the Average bid price, potentially ALB may be determined.
- B. In case of an ALB, the tender evaluation committee/appropriate authority of the respective tenders shall undertake the following three stage review process which is as below:
 - (i) To identify ALB as per the steps mentioned in SI no. 5.A.(i) and 5.A.(ii) whichever is applicable.
 - (ii) To seek and analyse the clarifications from the abnormally low Bidder in terms of resource inputs and pricing, including overheads, contingencies and profit margins. In that respect, the committee may refer to guideline of World Bank, AIIB, ADB etc. prescribed for ALB.
 - (iii) To decide whether to accept or reject the bid.
 - (iv) On acceptance of the bid, whether Additional Performance Security is to imposed on the bidder supplemented by adequate justification.
- C. **In case of acceptance of ALB with Additional Performance Security:**
 - (i) If any abnormally low bid is accepted under point 5.B.(iii) with additional performance security, it is to be noted that the total performance security should not exceed 20% of the total contract value.
 - (ii) The additional performance security shall be treated as part of the original performance security and shall be valid for a period similar to that applicable for defect liability period of the contract.
 - (iii) Non submission of the additional performance security shall constitute sufficient ground for rejection of the bid and similar assessment shall then be initiated for next ranked bidder if that bidder is also identified as ALB.

(C) GENERAL CONDITIONS OF CONTRACT:

1. INSPECTION OF SITE:-

- a) The Bidder is advised to visit and examine the site where the work is to be carried out and its surroundings, nature of work, site conditions, area for storage of materials, etc. and obtain for itself on its own responsibility all information that

may be necessary for preparing the bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with the specifications & requirements.

For site visit and any clarification/information/assistance, the intending Bidder may contact the Office of the DGM (civil), AEGCL, Ground floor, Bijulee Bhawan, Paltan Bazar, Guwahati, Assam-781001.

2. PREPARATION OF BID:-

- a) Cost of Bidding:
The Bidder shall bear all costs associated with the preparation and submission of its Bid, and AEGCL shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- b) Documents Establishing Conformity of the Goods and Services: -The documentary evidence of the conformity of the goods and services to the Bidding Document may be in the form of letter, drawings and data, and shall furnish. A detailed description of the essential technical and performance characteristics of the goods and services, including the functional guarantees of the Goods, in response to the specification.
- c) Bidder should note clearly that department should not take any responsibility for issuing of any materials, equipment's and T&P's that may be required in the work.
- d) All materials, labours, equipment's, T&P and heavy vehicle etc. required in the work shall have to be arranged by the bidder/contractor from his own sources in the event of allotment of the said work to him/them.
- e) Water to be used in the work should be clean and free from all impurities; the bidder should note that no water will be provided to them for the execution of the work from the department
- f) The department is also not bound to supply power that may be required in the execution of the work. However, subject to the availability of the power source near the vicinity of the work site, the department on payment of tariff as applicable at the time of execution of work may arrange one point near the work site.
- g) The bidder should clearly understand that all materials to be utilized in the work must confirm to the specifications. No substandard materials will be allowed to utilize in the work. Samples of each and every material to be brought to the site of work shall have to be get approved by the competent authority of the department before use.
- h) The contract must not be sublet under any circumstances. If any contractor found in doing so, his work liable to be terminated.
- i) The specification for the work shall be as per specification laid down in the items of work contained in the enclosed schedule of items of work or as per the APWD schedule of rates for Building (civil works), Sanitary and Water supply and internal electrification respectively (whichever is applicable) but, certain modification in the specification and method of execution of work if required shall have to be carried out which shall be finalized with the contractor bilaterally through discussion

3. PRICE BID:-

- a) Unless otherwise specified in the Bid Document and/or AEGCL's Requirements, bidders shall quote for the entire plant and services on a single responsibility basis such that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the including procurement, delivery, testing of materials, construction, installation and completion of the Work. The rate should also include the cost of testing of materials at the approved laboratory, carriage and transportation of sample, preparation of report, submission of report in all respect as required by AEGCL. This includes all requirements under the Contractor's responsibilities for completing the work and

where so required by the bidding document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the Bidding Document, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.

- b) Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- c) **Bidders quoted price should include all cost of testing of materials, transportation of sample, storage, preparation and submission of report during approval period, construction period as well as after completion of the work.**
- d) Whenever forest produces like sand, stone, timbers etc are used in the work the contractor have to furnish documentary proof that requisite royalty on such produces has been paid to the concerned Department, otherwise will be deducted at source at applicable rate.
- e) Taxes like work contract, income tax etc. which need to be deducted at source as per the prevailing law, will be deducted at source.
- f) The Bided Price should on Fixed Price basis, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account.

4. SITE FACILITIES: -

- a) The contractor shall visit the site to assess the nature and volume of the work. It will be in their scope to make accessibility to the work site, cleaning, dismantling and disposal of the same.
- b) AEGCL will not provide any accommodation at the work site to the contractor and their field personnel. No claim shall be entertained from the bidder for making his own arrangement for providing accommodation to the labours and bidder will bear entire expense. The same has to be arranged by the contractor on their own. However, AEGCL may provide space for storage of the materials but responsibility of the material and their safety shall be taken care of by the Contractor. In case of non-availability of space under AEGCL the same should be arranged by the contractor outside AEGCL campus/work site at their own cost and responsibility.
- c) AEGCL shall not be responsible for the safety of the workers at site either on account of the works executed by the Contractor or on account of the works executed by any other agency involved at that time.
- d) AEGCL shall on no account be responsible for the expenses incurred by the Contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangements.
- e) The quoted price shall be deemed to include charges for all site facilities for labour that are considered necessary for execution of the work.
- f) No claim shall be entertained from the bidder for making his own arrangement for approach roads from outside PWD road to the site and bidder will bear entire expenses.
- g) AEGCL on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already billed and paid for by the AEGCL.
- h) Any facilities available at site shall be utilized only with prior permission of AEGCL and it should not be taken as granted for availing such services.

5. DEFECT AFTER COMPLETION OF WORK:-

- a) The contractor shall make good at his own cost and to the satisfaction of AEGCL all defects, or other faults which may appear during the defect liability period.

In default, AEGCL may employ and pay other agency or persons to amend and make good such damages. Losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor, failing which the same shall be recoverable from the payment due to the contractor and performance guarantee. In the event of amount due and performance guarantee being insufficient, the balance amount will be recovered from the contractor from the amount due or retained for other works executed in AEGCL.

6. VARIATION AND DEVIATION OF QUANTITY:-

- a) The Tendered rates shall hold good for any variations in the Tendered quantities for legitimate completion of works as per original design on account of any modification in the bill of quantities.
- b) **Deletion of work:**
AEGCL and its representative have the right to delete or decrease any item or quantity from schedule of quantity at its discretion if deemed necessary. No claim by the contractor will be admissible for this deletion or deduction of Item/quantity from schedule of quantity.

7. LABOUR LEGISLATION: -

- a) The Bidder shall comply with the provisions of the Apprentices Act 1961, payment of Wages Act 1936, Minimum Wages Act 1948, Employees Liability Act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act 1947, Maternity Benefits Act 1961, and the Contract Labour (Regulation and Abolition) Act 1970, Provident Fund Act or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- b) The Bidder shall indemnify and keep indemnified AEGCL against payments to be made under and for the observance of the laws aforesaid and the Contractors' Labour Regulations without prejudice to his right to claim. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- c) The Bidder shall at his own expense arrange for all the safety provisions for the safety of all workers and employees directly or indirectly employed on the work by the Bidder.
- d) The Bidder shall be fully responsible at his own expenses for compliance all the labour regulations and rules to be observed by them. The Bidder shall fully indemnify AEGCL against any action by the state and/or Central Government for any default or alleged default by the Bidder for violation of any of such rules and regulations. If, due to any default of the Bidder, AEGCL has to incur any expenditure for compliance of the rules and regulations or for any other reason connected with such default, AEGCL shall be entitled to recover from the Bidder all such expenditure in full from any payment due to the Bidder.

8. GOVERNMENT AND LOCAL RULES:-

- a) The Contractor shall conform to the provisions of all local bye-laws and acts relating to the work and to the regulations etc. of the Government and Local Authorities and of any Company whose system and design is proposed to be connected/utilized. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities and shall indemnify AEGCL against such liabilities and shall defend all actions arising from.

9. ELIGIBILITY OF CONTRACTORS EMPLOYEES: -

- a) The Contractor shall employ in and about the Execution of the works only such persons as are skilled and experienced in their several trades. A list of such personal should be submitted in corresponding Appendix.

10. ENGINEER AT LIBERTY TO OBJECT:-

- a) AEGCL's Site in-charge shall have right to remove any person provided by the Contractor who, in the opinion of the Site in-charge, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without consent of the Engineer. Any person so removed from the Works shall be replaced immediately without hampering the work.
- 11. TAXES: -**
- a) Any taxes, royalties and duties as per Govt. Law should be responsible of the contractor and must be included in their quoted rate.
- 12. INSURANCE: -**
- a) The bidder shall arrange for any pay/cost of personnel accident insurance, medical treatment etc. in respect of their employees assigned to the works for all time and shall govern by Law of the land.
- 13. DAMAGE TO PERSON AND PROPERTY: -**
- a) The Contractor shall be responsible for all injury to the work or to workmen, to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of contractor or its employees, against whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this Contract. The Contractor shall at his cost effect the insurance necessary and indemnify AEGCL entirely from all responsibility in this respect. The scope of insurance is to include loss or damage to the work and workmen due to carelessness, accident including fire, earthquake, floods, all medical expenses, compensation to be borne in the event of accident etc., damage or loss to the Contract itself till this is made over a complete state. Insurance is compulsory and must be affected from the very initial stage and should cover the entire contract period till handing over of complete works. The Contractor shall also be responsible for anything which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this Contract.
- AEGCL shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or occurring from or in respect of any such claim for damages from any sums due or to become due to the Contractor.
- 14. ACCEPTANCE OF BID AND CONTRACT AGREEMENT:-**
- a) An agreement shall have to be drawn on non-judicial stamp of appropriate value with AEGCL by the selected Contractor in AEGCL's General Conditions of Supply and Erection 2009 of contract within 15 (fifteen) days from the date of issue of the LOI. Wherever there is any variation in between the conditions of AEGCL's General Conditions of Supply and Erection 2009 and the above terms & conditions, this bid conditions will supersede the conditions of AEGCL's General Conditions of Supply and Erection 2009.
- 15. STATUTORY AND SAFETY REQUIREMENT:-**
- a) Each and every safety measure for MAN and MACHINE will be the sole responsibility of the Contractor without any prejudice. Compensation claims if any will also be the responsibility of the contractor without any prejudice.
- b) During the execution of the work, the contractor shall have to mark the site with banner warning/indicating precautions.
- c) The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

- d) Have full regard for the safety of all persons entitled to be upon the Site and keep the Site (So far as the same is under his control) and the Works in an orderly state appropriate to the avoidance of danger to such persons, and
- e) Provided and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works or for the safety and convenience of the public or others, and Take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods.

16. PAYMENT TERMS: -

- a) No advance/Mobilization advance shall be made in this contract.
- b) No claim for interest shall be entertained by AEGCL in respect of any money or balance which may be in AEGCL's hands owing to any dispute or difference or misunderstanding between the contractor and the AEGCL or due to the reason beyond the reasonable control of AEGCL.
- c) No running bill shall be paid to the contractor.
- d) Payment for any deviated quantity will be paid only after approval.
- e) Final bill must contain the original site register.
- f) First & Final payment shall be released to the contractor only after completion of the work/final acceptance by AEGCL.
- g) Payment is subject to availability of specific fund.
- h) The Bidder / Firm will have to be submitted the following Net Banking details.
 - Banker's Name & Branch
 - Account No
 - Banker's address
 - Banker's IFSC Code
 - Banker's RTGS Code

17. ADDITIONAL WORKS:-

The Contractor shall, when ordered in writing by the concerned authority, perform extra work and furnish extra materials not required by the invitation or included in the "Bill of Quantities", but forming an inseparable part of the work concerned. For extra work and, materials will ordinarily be paid for the lump sum or unit price/rates stated in the order. Whenever in the judgement of the concerned authority, it is impractical, because of the nature of the work or for any other reason to otherwise fixed the price/rate in order, the extra work and materials shall be paid for on the basis or actual necessary cost plus overhead and profit allowances as indicated hereunder.

The actual necessary cost will include:

- a) Market value of the materials utilized in the extra work, including taxes and duties, if any.
- b) Actual cost of handling and transportation of materials wherever applicable.
- c) Direct labour charges.
- f) Further supervision charges and profit will be allowed at 10% on the sum. In case any material or parts are furnished by the department no overhead and profit will be allowed on the value of such materials or parts.

18. RETENTION MONEY:-

- a) 10% retention money will be deducted from running bill, which will be released along with the final bill on completion of the work in all respect.

19. WARRANTY:-

- a) The term period of warranty shall mean the period of 18 months from the date of Taking Over of the Work by AEGCL. A Taking over Certificate (TOC) will be issued by the appropriate authority.
- b) The Contractor must handover the warranty card or other relevant documents from the OEM at the time of submission of the bill.

20. SUSPENSION OF WORK:-

- a) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by AEGCL subject to other provisions contained, AEGCL may without prejudice to his any other rights or remedy against the Contractor in respect of any delay in commencing, completing the work may serve notice in writing absolutely determine and cancel the Contract.

21. EXTENSION OF TIME:-

- a) Time is the essence of the contract. No extension of time shall be allowed except on valid reason after pre-approval from competent authority.

22. CHANGE OF NAME OF THE TENDERER:-

- a) At any stage after tendering, AEGCL shall deal with the Contractor only in the name and the address under which he submitted the tender. All the liabilities/responsibilities for due execution of the contract shall be that of the Contractor.
- b) Any change/ alteration of name/ constitution/ organization of contractor shall be duly notified to the AEGCL and the AEGCL reserves the right to determine the contract, in case of any such notification.

23. DEATH, BANKRUPTCY ETC.:-

If the Contractor becomes bankrupt or being a corporation is in the process of winding up, amalgamation or reorganization, the AEGCL shall be at liberty to:

- i. Terminate the contract forthwith by notice in writing to the Contractor or to the liquidator or receiver or to any person in whom the contract may become vested.
- ii. Give such liquidator, receiver or other person the option of carrying out the contract subject to his providing a guarantee for the due and faithful performance of the contract up to an amount to be determined by the AEGCL.

In case of death of the Contractor before completion of work and supply, the Engineer or AEGCL shall be at liberty to:

- a) Close up the contract and take over the completed portion of work done and made as per specification and make final payment to the legal heir of the Contractor on receipt of claim from such legal heir.
- b) Give the contract to the legal heir of the Contractor subject to his depositing a performance security for the due and faithful performance of the contract. The performance security amount shall be determined by the AEGCL commensurate with the incomplete portion of the work. The AEGCL will enter into a fresh contract with the legal heir of the Contractor on the same terms and conditions of the earlier contract.

24. CONTRACTUAL FAILURE, LIQUIDATED DAMAGE AND PENALTY:-

- a) Liquidity Damages 1.0% (one percent) of the amount of delayed work per week subjected to the maximum 10 % of the contract value.

25. TERMINATION OF CONTRACT: -

- a) If the performance of the contract is not satisfactory and not corrected within 15 days of receiving notice, then employer shall be at liberty to terminate the contract and get the work executed through other means at the risk and cost of the Contractor.

26. PAYMENT ON TERMINATION: -

- a) In the event of termination of the contract, AEGCL shall be at liberty to get balance work done by any third party at the risk and cost of the contractor and due payment of the contractor, if any shall be released after the completion of whole of the works.

27. SUSPENSION OF BUSINESS DEALINGS WITH FIRMS/ CONTRACTORS:

-

- a) The AEGCL may suspend business dealings with a Firm/ Contractor, if:-
 - i. The Central Bureau of Investigation or any other investigating agency recommends such a course in respect of a case under investigation; and if a prima facie case is made out that the firm is guilty of an offence involving unethical, unlawful, fraudulent means in relation to business dealings, which, if established, would result in business dealings with it being banned.
 - ii. The AEGCL has past record of non-performance of the Firm in its previously awarded contracts.
 - iii. The AEGCL has record of ban against the Firm by other Government /Public sector utility.
- b) However, the AEGCL shall give the Firm/ Contractor a fair chance to explain the circumstances of such previous suspensions.

28. BANNING OF BUSINESS DEALINGS WITH FIRMS/ CONTRACTORS:-

The AEGCL may ban business dealings with a Firm/ Contractor, if:-

- a) The owner (s) of the Firm/ Contractor is convicted by a court of law following prosecution for offences involving unethical, unlawful, fraudulent means in relation to business dealings.
- b) There is strong justification that the Firm has been guilty of malpractices such as, bribery, corruption, fraud, substitution of tenders, interpolation, mis-representation, evasion or habitual default in payment of any Government tax etc.
- c) The Firm continuously refuses to return government dues without showing adequate cause and government are reasonably satisfied that this is not due to reasonable dispute which would attract proceeding in arbitration or court of law.
- d) The Firm is found guilty of involving in unethical practices, such as:-
 - i. "corrupt practice" involving offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of any such official/ party in procurement process or in contract execution.
 - ii. "fraudulent practice" involving misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer.
 - iii. "collusive practice" involving a scheme among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
 - iv. "coercive practice" involving harming or threatening to harm directly or indirectly, persons or their property to influence procurement process or the execution of a contract.

The AEGCL may sanction a Firm/ Contractor or its successor, including declaring ineligible, indefinitely or for a period of not less than 3 (three) years.

29. FORCE MAJEURE CONDITION

- a) Force Majeure condition shall be considered as any circumstances beyond reasonable control of the party claiming relief, including but not limited to strikes, lockout, civil commotion, riot insurrection, hostilities, mobilization, war, fire, flood, earthquake, malicious damage or accidents could entitle contractor to extension time. Any such delay should intimated within 10 (ten) days from the beginning of such delay to

consider/approved, any claim without prior information may not be considered under force Majeure.

30. SETTLEMENT OF DISPUTE AND ARBITRATION:-

- a) Any dispute arising out of the contract will be first settled bilaterally between AEGCL and Contractor. In case, dispute cannot be settled bilaterally, it will be referred to arbitration to be by an arbitrator appointed by AEGCL. The contractor shall not stop the work during settlement of any dispute. All disputes shall be subjected to the jurisdiction of District Court of respective District of work.

31. POLLUTION AND ENVIRONMENT: -

- a) Each and every measure should be taken to adhere to the standard norms to avert any occasion of Air Pollution, Water Pollution, Soil Pollution and Sound Pollution. In case of any deviation leading to any legal action the Contractor will be solely responsible without any prejudice.

32. ACCEPTANCE AND TAKEOVER:-

- a) When the term of contract shall be fully complied with completing all works as per approved drawing and technical specifications to the satisfaction of the Department for a period as applicable, the Contractor/Firm shall have to submit Performance Certificate to the office of the undersigned after the satisfactory completion of the work through the executing authority for finalization of the work/payment as well as for the final acceptance and taking over the completed work and to issue the necessary certificate thereof.

(D) WORK SCHEDULE:

1. SITE HANDOVER: -

- a) Handing over of the work site will be done in presence of Assistant General Manager, 132kV GSS Kahilipara, AEGCL and contractor or its authorized representative.
- b) The contractor has to submit the list of manpower along with contact numbers to be engaged for the work to the Assistant General Manager, 132kV GSS Kahilipara, AEGCL.
- c) The date of site handing over to be noted on the Site register duly signed by the Assistant General Manager, 132kV GSS Kahilipara, AEGCL and contractor or its authorized representative.

2. WORK COMMENCEMENT: -

The work should be started only after having the following documents.

- a) Site Register
- b) Measurement Book
- c) Drawings
- d) Specifications of item & schedule of Quantity
- e) Approved Material

3. SITE REGISTER:-

- a) It will be issued by the department along with the work order.
- b) It will be the responsibility of the Contractor to record and update the site register with details of Day-to-Day activities and other details.
- c) The days on which no work is carried out should be recorded in the site register with proper justification.
- d) Any instruction by AEGCL officials during site visit must be noted properly and should be jointly signed by the official and the contractor or its authorised representative.

In case of any disagreement, the Contractor must notify AEGCL in written.

- e) Any deviation in works must be properly noted in the site register by the Contractor along with proper justification for it.
- f) Progress report along with work completion percentage must be prepared by the Contractor on the basis of site register log and has to be submitted to AEGCL on 1st and 16th date of the month.
- g) Site register shall be verified from time to time by the Site In-charge and any anomalies found will be forwarded to higher authorities in written by the Site In-charge.

4. WORKING PROCEDURE:

- a) **All materials must be procured only after verification and approved at store by AEGCL or any authorised representative.**
- b) Any materials bought to the site of work without approval from AEGCL, those materials will not be accepted and cannot be used in carrying out the work.
- c) All the work must be carried out as per the directions of AEGCL and no deviation from the directions shall be allowed under any circumstances. In case of inevitable discourse, the contractor must get the deviation approved from the AEGCL.
- d) If any kind of unapproved deviations are observed during the course of the work, the contractor shall have to redo the work as per the direction of AEGCL at the cost of the Contractor.
- e) It shall be the contractor's responsibility to clear any unusable debris/left out materials from the campus. No unwanted material can be left unattended by the contractor and the same must be cleared before handing over the site to AEGCL.
- f) The reusable or valuable dismantled materials during the work have to be shifted to a place as decided and directed by the AEGCL.
- g) Since multiple Agencies will be working on the same work site, There should be proper coordination between different contractors involved in the same project or related projects under AEGCL.

5. PERT CHART OR BAR CHART: -

The successful bidder within 10 (ten) days before the contract is awarded will make out a detailed PERT Chart covering all activities along with detailed program chart on accepted scheme indicating various stages of execution, method of execution and completion of work in different stages keeping the period of completion in view and submit the same to the Engineer for the consideration and approval.

(E) GENERAL SPECIFICATION OF WORK:

The work is to be executed as per specifications of the BOQ as provided by AEGCL. Any unauthorised deviation is strictly prohibited and any deviation is to be corrected by the contractor at his own risk and cost.

1. SITE PREPARATION: -

- a) All works required for site preparation will have to be carried out by the contractor at his own expense, whenever directed by the Site In-charge.
- b) The Contractor shall clear the site of unnecessary vegetation to prepare the site for work only as per directions given by the Site In-charge.
- c) Any unnecessary structures are to be demolished and serviceable materials to be stacked and stored as directed by AEGCL.
- d) Any waste or unwanted material has to be disposed by the contractor if ordered by AEGCL. No materials will be allowed to leave the site without the permission of the Site In-charge.
- e) The Contractor will have to construct roads or any means for transport as instructed by the Site in-charge if the site is not easily accessible.

- f) All water which may accumulate on the site before or during the progress of the works or in trenches and excavations shall be removed and drained out from the site to the satisfaction of the Site In-charge by the Contractor.
- g) Any other work required for adequate preparation of the site shall be carried out by the Contractor.

2. PROFILE SETTING AND LEVELLING:-

Profile setting and levelling for the site has to be carried out by the Contractor for finding the amount of earth cutting and filling that will be required for setting the Final Ground Level, Tie Beam Level and to find the amount of excavation to be done for required foundation depth.

3. SETTING OF LAYOUTS: -

- i. The Site In-charge shall supply dimensioned drawings, levels and other information necessary to enable the Contractor to set out the works and the Contractor shall set out the works and be responsible for the accuracy of the same.
- ii. He shall rectify at his own cost and to the satisfaction of the Site In-charge any error found at any stage which may arise through in accurate setting out unless such error is based on incorrect data furnished in writing by the Site In-charge, in which case the cost of rectification shall be borne by the Corporation.
- iii. The Contractor shall protect and preserve all bench marks used in setting out the works till end of the Defects Liability Period unless the Site In-charge directs their earlier removal.

4. EXCAVATION AND BACKFILLING: -

- i. Trenches for foundation and other structures shall be taken out to the levels and dimensions shown on the approved drawings or to such other levels and dimensions as the Engineer-in-charge may direct. The bottom of all excavations shall be carefully levelled and stopped on benches as directed by the Engineer. Any pocket of soft or loose materials and fissures in the bottom pits and trenches shall be removed and the cavities so formed filled or grouted with concrete as directed by Engineer-in-charge. When any excavation has been done and trimmed to the required levels and dimensions, the Engineer-in-charge shall be informed accordingly so that he may inspect the complete pit or trench and no excavation shall be filled in and covered with concrete until it has been inspected and the contractor has been authorized to proceed with work. All surplus excavation not required for refilling shall be deposited in embankments, or otherwise disposed off as directed. The work shall include all necessary sheeting, shoring, bracing, drawing and pumping out water, removal of all legs, stumps, grabs and other deleterious matters, obstructions, necessary for placing the foundations.
- ii. When required by the Engineer-in-charge, materials in the last 500mm of depth of the excavations shall not be removed until immediately before the concrete is to be placed.
- iii. Refilling of foundation pits and trenches shall be carried out only after the foundation and structure works within the excavation have been inspected and approved by the Engineer-in-charge. Unless otherwise directed by the Engineer-in-charge all fillings shall consists of approved materials. All space between foundation concrete and the sides of excavation shall be refilled to the original surface using approved plant, in single layers not exceeding 250mm loose thickness which shall be watered and completed to a dry density not less than that of the adjoining soil strata. Timber sheeting and other excavation support shall be carefully removed as the filling proceeds but the removal of such supports will not relieve the contractor of his responsibility for the stability of the works.

5. **DEWATERING: -**
- i. Where water is met with during excavation due to stream flow, seepage, shoring, rain or other reasons, the contractor shall take adequate measures such as bailing, pumping, constructing diversion channel, drainage channel, ponds and other necessary works to keep the foundation trenches dry and to protect the green concrete against damage by eruption or sudden rising of water level.
 - ii. Approval of the Engineer-in-charge shall be required for any method adopted, for the adequacy of dewatering and protection arrangements and for the sound safety of the work shall be required.
6. **PREPARATION OF BASE:-**
- i. Any excavation taken out to a greater depth than that required shall be back filled with concrete of the foundation grade at the cost of the contractor. If required sand may be used for backfilling, if permitted by Site In-Charge.
 - ii. Refilling of foundation pits and trenches shall be carried out only after the foundation and structure works within the excavation have been inspected and approved by the Engineer-in-charge.
 - iii. Unless otherwise directed by the Engineer-in-charge all fillings shall consists of approved materials.
 - iv. All space between foundation concrete and the sides of excavation shall be refilled to the original surface using approved plant, in single layers not exceeding 250mm loose thickness which shall be watered and completed to a dry density not less than that of the adjoining soil strata.
 - v. Timber sheeting and other excavation support shall be carefully removed as the filling proceeds but the removal of such supports will not relieve the contractor of his responsibility for the stability of the works
7. **BRICK SOLING:-**
- i. Bricks in soling should be well placed and the surface after placing of brick should be flat.
 - ii. An extension of 75 mm should be maintained on each side of the footing or as specified in the drawing.
8. **PLAIN CEMENT CONCRETE:-**
- i. Plain Cement Concrete works must be carried out in dry condition and dewatering should be carried out wherever necessary before placing of concrete.
 - ii. The proportion of Plain Cement Concrete should be 1:3:6 or as specified in the drawing and design. The quality of the mix will have to be checked and approved by the Site In-charge.
 - iii. Curing should be done properly and as per instructions.
9. **SHORING AND PROPPING:-**
- i. For pits and trenches requiring stabilising of slope, shoring or propping may be carried out at the Contractors own expense.
10. **REINFORCEMENT:-**
- i. All reinforcement shall be cleaned thoroughly by removing loose scales, oil, grease or other deleterious materials. The contractor shall obtain the approval of the Engineer-in-charge or his representative to the reinforcement when fixed in position before any concrete is deposited in the forms.
 - ii. Bars shall be bent cold or straightened in a manner to the satisfaction of the Engineer-in-charge or his representative. Bars bent during transport or handing shall be straightened before using on work. They shall not be heated to facilitate bending. Welding shall be done as per latest IS Code of practice.
 - iii. All reinforcement bars shall be cut and standard hooks for MS rounds made at ends and accurately placed in position as shown on the approved drawings. They shall be

securely held in position before and during concreting by annealed binding wires used for binding the reinforcement which shall be of approved quality soft annealed iron wire not less than 1 mm (18SWG) size, conforming to IS:280.

- iv. As far as possible, bars of full length shall be used. Where bars are required or permitted to be lapped by the Engineer-in-charge, or his representative, the over laps shall be staggered for different bars and located at points, along the span where bending moment is not maximum. The concrete measured over the reinforcing bars shall be in accordance with the approved drawings.

11. SHUTTERING AND CENTERING: -

- i. Shuttering for concrete shall be made of either metal or timber suitably lined and of substantial and rigid construction true to shape, alignment and dimensions as shown on the approved drawings
- ii. Shuttering shall be mortar tight and shall be made sufficiently rigid by the use of ties and bracings to prevent any displacement, deflection or movement of any kind. They shall be strong enough to withstand all pressure, ramming and vibration, movement of persons, materials and plant during and after placing the concrete. Special measures shall be taken to ensure that the form work does not hinder the shrinkage of concrete because without this cracking could occur before the form work is removed.
- iii. When the Shuttering is ready for commencing concreting, the contractor shall inform the Site-in-charge or his representative to inspect and accept the shuttering as to their strength, alignment and general fitness.
- iv. **If the Site-in-charge is satisfied with the quality of shuttering then may allow the contractor for pouring concrete.**
- v. **Poor or old shuttering should not be used. The Site In-Charge at his own discretion may reject any shuttering material if found not satisfactory.**

12. REINFORCED CEMENT CONCRETE: -

- i. Optimum quantity of water shall be mixed to produce the design mix/nominal mix concrete of required workability.
- ii. Workability shall be such that the concrete surrounds and properly grips all reinforcement.
- iii. The degree of consistency, which shall depend upon nature of work and method of vibration of concrete, shall be determined by regular slump tests to be carried out by the contractor at his cost.
- iv. Usually for mass concrete in RCC works where vibrations are used the slumps shall be within 10mm to 25mm.
- v. The frequency of such tests and the natures of slumps shall be maintained within the limits specified by the Engineer-in-charge.
- vi. The Engineer-in-charge also reserves the right to carry out slump tests independently at his own discretion.
- vii. Cube moulds should be prepared for destructive testing randomly as per instructions given by Engineer In-charge.
- viii. Cement shall have to be weighed from bulk stocks at site and not by bags. It shall be weighed separately from the aggregates.
- ix. Water shall either be measured by volume in calibrated buckets or weighed. All necessary equipment shall be maintained in a clean and serviceable condition. Their accuracy shall be periodically checked.
- x. Honeycombed RCC structure should be dismantled immediately and reconstructed.
- xi. If Reinforced Cement Concrete works include Stone masonry works then stone masonry works should be carried out in stages. After completing one stage mortar

droppings shall be cleaned and Reinforced Cement Concrete works should be done before starting the second stage of stone masonry work.

13. STEEL WORKS:-

- i. Any kind of steel structural work such as roof truss, door, window, grill, roofing, staging etc. must be carried out in accordance to relevant IS codes, approved drawing, specifications and as per directions of the Engineer In-charge.

14. STONE MASONRY:-

- i. Stones used should generally be small enough to be lifted and placed by hand.
- ii. The lengths of the stones should not exceed three times the height and, the breadth on base should not be greater than three-fourth of the thickness of the wall, not less than 15 cm.
- iii. The height of stones may be up to 30 cm.
- iv. Stones with round surface should not be used.
- v. All stones should be wetted before use.
- vi. Percentage of water absorption shall not be more than 5%.
- vii. Mortar proportion for Stone Masonry works should be 1:6.

15. WEEP HOLES:-

- i. Sufficient No of weep holes including provision of Asbestos pipes (in the weep hole portion only) in abutments, wing and retaining walls is to be provided as directed by the Engineer-in-charge with contractors own labour, materials etc. No extra payments will be admissible for provision of the weep holes in RCC/Brick compound boundary wall and no deduction from quantity of concrete/Brick work shall be made for weep holes.

16. BRICK MASONRY:-

- i. Brick work in cement mortar with 1st class brick including racking out joints and dewatering if necessary, and curing complete as directed in sub-structure up to plinth level. Cement Mortar used should be in 1:4 proportion.

17. CONSTRUCTION JOINT:-

- i. All construction joints horizontal or vertical shall be at predetermined position according to approved drawing or as directed by the Engineer-in-charge. Prior to commencement of fresh concreting over any construction joint which has set but hardened, the removal of laitance and roughening shall be done by wire brushing and washing and care shall be taken to avoid dislodgement of coarse aggregates.
- ii. At construction joints where the concrete has hard, any skin or laitance shall be thoroughly hacked, swept cleaned and washed with clean fresh water. The surplus water shall be removed immediately before depositing fresh, concrete. The neat cement, grout shall be followed by 13mm thick layer of cement mortar of same proportion as in concrete and the concreting resumed immediately thereafter. The first batch of fresh concrete shall be forced hard on to the mortar layer and the set faces, angles and corners by means of compacting tools, vibrators etc. and the damping effect on vibration in such position shall be allowed for.
- iii. Construction joints shall be avoided as far as possible in case of structure, especially at tensile zones. Where unavoidable, concreting shall be carried out continuously up to such joints which shall preferably to transverse to the line of main compression. However, in all cases, the position of construction joints shall be predetermined and got approved by the Engineer-in-charge.

18. PLASTERING:-

- i. Surfaces to be rendered must be cleaned and made free from all dust, loose materials, grease, etc, and be well wetted for a few hours (the wall should not be soaked but only damped evenly); but the wall should not be too wet.

- ii. Plaster may be applied in one or two coats. No single coat should exceed 12 mm in thickness as thick coats shrink more and crack.
- iii. Plaster work on new construction should be deferred as much as possible so as to let shrinkage in reinforced concrete and masonry take place before plastering.
- iv. General proportion for cement plaster should be 1:4.

19. CURING:-

- i. Curing should be done as soon as possible after concrete is placed and when initial set has occurred and before it has hardened. It should be continued for a minimum period of 7 to 12 days when normal (Portland) cement is used, 4 to 7 days when rapid hardening cement is used, and should be kept thoroughly wet for 24 hours when high alumina cement is used.
- ii. Vertical surfaces may be covered with hanging curtains. Columns and small members shall be cured by wrapping round them wet sacks or by sprinkling water continuously. On vertical surfaces it should be checked that the wet fabric is in contact with the surface.
- iii. Water should be sprinkled on the underside of beams and slabs for proper curing.

20. PRIMING AND PAINTING: -

- i. As per specifications in the schedule of quantity.

22. CONCRETE PAVEMENT PAVERS BLOCK:

- i. Block testing report of every batch of Concrete pavers block must be submitted to the Engineer In-charge. In case of non-submission of quality reports, AEGCL reserves the right to discard the batch of material before or after construction of approach road at the location is complete.

(F) QUALITY CONTROL.

If desired by AEGCL, the contractor must perform the test on construction materials. These tests listed in the document should be carried out as per Indian Standard Code specifications of the respective tests. Proper records of these tests should be maintained.

1. Tests for fresh concrete:

- i. Workability: To determine the workability of fresh concrete by slump test as per IS: 1199-1959

2. Tests on Hardened Concrete:

- i. Non-destructive tests:
Rebound hammer test: To assess the likely compressive strength of concrete by using rebound hammer as per IS:13311(Part 2)-1992
Compression test: to determine the compressive strength of concrete specimens as per IS:516-1959

3. Tests on Brick:

Testing of brick should be done as per IS 1077:1992 and related IS Codes

- i. Compressive strength test: IS 3495(Part-1): 1992
- ii. Water Absorption test: IS 3495(Part-2) : 1992
- iii. Efflorescence test: IS 3495(Part-3) : 1992

4. Tests for Steel:

- i. All reinforced steel bar should meet the specifications of IS 1786:2008

Appendix-1

COVERING LETTER (ON THE APPLICANT'S LETTER HEAD)

To,

The Chief General Manager (O&M), LAR
Assam Electricity Grid Corporation Limited
Bijulee Bhawan, Paltanbazar, Guwahati-01.

Sub: **1. Replacement of water supply service pipeline with new pipes (CPVC) alongwith some bibcock at ASEB Colony, Kahilipara, Ghy-19**

2. Construction of 9 No.s of staging along with supplying, fitting & fixing of 34 No.s of HDPE Over-head water tank for Assam Type Quarter (Type-V & VI) at ASEB Colony, Kahilipara, Guwahati-19

Ref: NIT No. AEGCL/DGM(CIVIL)/2023-24/01

dtd. 16.10.2023

Sir,

Having examined the terms & conditions, technical specifications, detailed items of work etc. as well as acquainting myself/ourselves with site of work, surroundings to get the required materials etc. I am/we are to submit herewith my/our tender for the above-mentioned work. My/our rates are quoted as per the specification laid down in the schedule of items of work, considering cost of design & preparation of structural drawing, materials, labours, haulage, taxes, royalty etc.

I /We clearly understand that all materials, tools and plants, machineries, labours, haulage etc. required in the work shall have to be arranged by me/us from my/our own resources in the events of allotment of the work to me/us.

I /We also clearly understand that in the event of acceptance/approved of my/our tender, the work shall have to be executed strictly as per specifications and the same shall have to be completed in all respects within the stipulated time failing which I am/We are liable to be penalized as per rules laid down in Tender document as well as agreement thereof.

Appendix-2
PROFILE OF THE BIDDER

Sl. No.	Particulars	To be filled by Bidder
a)	Name of the Bidder	:-
b)	Registration with Memorandum of Association	:-
c)	Financial statements for last 3(three) years (CA/CMA certified)	
d)	PAN	:-
e)	GST Registration number	:-
f)	Employees Provident Fund	:-
g)	Employees State Insurance Certificate	:-
h)	Labour License registration	:-
i)	Bank Solvency Certificate indicating the amount	:-
j)	Income Tax Return (for last three years)	
k)	Date of Establishment/ Incorporation	:-
l)	Postal Address	:-
	House No.	:-
	Lane	:-
	Street	:-
	Town/Village	:-
	Post Office	:-
	P.S.	:-
	District	:-
	Pin code	:-
m)	Telephone Number	:-
	Mobile No.	:-
	E-Mail Address	:-
	Website	:-
n)	Name(s) of the Owners / Directors/Partners	:-
o)	Name of the Banker with Address and Telephone Number	:-
p)	Contact Person Details (Furnish here name of that person with whom AEGCL may get in touch for more information or clarifications)	Name:- Designation:- Mobile Number:- Email Address:-

Note: Bidder may attach additional sheets, if required.

Appendix-3

WORK EXPERIENCE OF THE BIDDER

- a) Experience having completed similar works during the last 7 years ending last day of the month previous to the one in which applications are invited should be either of the following:
- Three similar completed works** each costing not less than the amount equal to **Rs. 12,37,760.00** (Rupees Twelve Lakhs Thirty Seven Thousand Seven Hundred Sixty) only.
or
 - Two similar completed works** each costing not less than the amount equal to **Rs. 15,47,200.00** (Rupees Fifteen Lakhs Forty Seven Thousand Two Hundred) only.
or
 - One similar completed work** costing not less than the amount equal to **Rs. 24,75,519.00** (Rupees Twenty Four Lakhs Seventy Five Thousand Five Hundred Nineteen) only.

Note: “Similar work” is defined as **Civil Works** complete in all aspects for Govt. Department or PSUs only.

- If the nature of work and value differs from the above stated conditions, it will not be considered while evaluation of technical qualification.
- Work order along with work completion certificate are to be mandatorily attached for technical bids to be responsive.

Name of work	Nature of Work	Executed Amount	Starting Date	Completion Date

- b) Bidders must compulsorily submit work order and work completion certificate issued from Govt Department/reputed PSUs satisfying the above-mentioned work experience criteria for technical qualification. Moreover, AEGCL reserves the right to scrutinise any work order/work completion certificate submitted by the bidders with issuing authority and if any abnormalities are observed in the same, their bids will be rejected.

Note:

- Bidder has to attach additional sheets, if required.
- Bidder have to furnish necessary work order copies for technical evaluation of experience.

Appendix-4

FINANCIAL QUALIFICATIONS

Financial Qualifications:

- (i) Minimum average annual turnover of **Rs. 9,28,320.00** (Rupees Nine Lakhs Twenty Eight Thousand Three Hundred Twenty) only calculated as total certified payments received for contracts in progress or completed, within the last 3 (Three) years (Audited balance sheet)
- (ii) The Contractor must furnish their Bank Solvency Certificate indicating the amount by concerned authority in necessary format as per banks.
Note: Bidder may attach additional sheets, if required.
- (iii) Financial statements for last 5(five) years out of which best of 3(three) years financial statements will be considered for calculation of turnover. (should be CA/CMA certified)