



Standard Bidding Document

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Technical Specifications

Name of Work	:	Balance Internal Electrification work of Library Block of BGSB University at Rajouri.
District	:	Rajouri
Unit	:	Unit Electrical, JKPCCLtd., Jammu.
Estimated Cost	:	Rs. 34 Lacs
Time of Completion	:	In tandem with Civil Works



J&K PROJECTS CONSTRUCTION CORPORATION LTD.

(A J&K Govt. Undertaking)

E-NIT No: 12 of 2019-20 Dt. 07.12.2019

On behalf of Managing Director, Jammu & Kashmir Projects Construction Corporation Ltd., the Deputy General Manager, Unit Electrical JKPC Ltd., Jammu invites e-tenders from approved and eligible electric contractors registered with JKPC Ltd./J&K State Govt./CPWD/Railways and other State/Central Govt. undertaking for the following work:

S. No	Name of Work	Estimated Cost (Rs. in Lacs)	Cost of document	Earnest Money (Rs. in Lacs)	Time of completion	Class of Contractor
1.	Balance Internal Electrification work of Library Block of BGSB University at Rajouri.	Rs 34.00 Lacs	Rs.1000/-	Rs. 0.68 Lacs	In tandem with civil works	"A"

Qualification criteria, scope of work, tender documents, BOQ and all other terms & conditions can be seen and downloaded from www.jktenders.gov.in.

Critical Dates:

1.	Period of downloading of NIT	16.12.2019. to 06.01.2020 upto 1400 Hrs.
2.	Pre-Bid Meeting	23.12.2019 at 1230 Hrs. in Office of General Manager, JKPC Ltd., Rail Head Complex, Jammu
3.	Bid submission dates along with proof of cost of Tender Document and EMD	24.12.2019. to 06.01.2020 upto 1400 Hrs.
4.	Date of opening of technical Bid	08.01.2020 at 1230 Hrs. in Office of Deputy General Manager, JKPC Ltd., Rail Head Complex, Jammu
5.	Status of Funds	Available
6.	Hard Copies of Technical Bid will be invited from L1 only	

Any other information regarding e-tendering process can be had from the office of undersigned or e-tendering Cell, Jammu.

**Deputy General Manager,
Unit -Electrical, JKPC Ltd.
Jammu.**

No : DGM/E/J/

Dated :

Copy to the: -

1. Managing Director JKPC Ltd, Srinagar for information.
2. Executive Director, JKPC Ltd. Srinagar for information.
3. General Manager (J), JKPC Ltd Jammu for information.
4. Deputy Director Information Jammu for information. It is requested that the notice may please be published in two leading English daily newspapers of State and one National Paper for its wide publicity.
5. E-Tendering Cell for uploading the Tender on www.jktenders.gov.in and www.jkpc.com

OFFICE OF THE DEPUTY GENERAL MANAGER UNIT-ELECTRICAL JKPCCLtd., JAMMU.

NOTICE INVITING TENDER

E-NIT No: 12 of 2019-20 Dt. 07.12.2019

INVITATION:

On behalf of Managing Director, Jammu & Kashmir Projects Construction Corporation Ltd., the Deputy General Manager, Unit-Electrical, JKPCCLtd., Jammu invites e-tenders from approved and eligible electric contractors registered with JKPCCLtd./J&K State Govt./CPWD/Railways and other State/Central Govt. undertaking for the following work: **Balance Internal Electrification work of Library Block of BGSB University at Rajouri.**

INSTRUCTIONS TO BIDDERS

- 1) The bidding documents can be downloaded from the website <http://jktenders.gov.in> and schedule of dates is as under:

1.	Period of downloading of NIT	16.12.2019. to 06.01.2020 upto 1400 Hrs.
2.	Pre-Bid Meeting	23.12.2019 at 1230 Hrs. in Office of General Manager, JKPCCLtd., Rail Head Complex, Jammu
3.	Bid submission dates along with proof of cost of Tender Document and EMD	24.12.2019. to 06.01.2020 upto 1400 Hrs.
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5.	Status of Funds	Available
6	Hard Copies of Technical Bid will be invited from L1 only	

- 2) Bid documents can be seen at and downloaded from the website <http://jktenders.gov.in> Bid documents contain qualifying criteria for bidders, specifications, bill of quantities, conditions and other details.
- 3) All the relevant original instruments (Hard copies) in respect of successful bidder only, shall be submitted to General Manager, JKPCCLtd., Jammu before award of the contract.
- 4) Bids must be uploaded by bid security in shape of CDR / FDR/ BG payable at Jammu pledged in favour of Accounts Officer, JKPCCLtd., Jammu and shall be valid for one year and **cost of the tender document** shall be deposited into the Bank accounts by the bidder for which the following information can be used by the bidder:
- i) Name of the Bank = J&K Bank Ltd
 - ii) Account title = Financial Controller JKPCCLtd., (Current Account)
 - iii) Account No = 0084010100002408
 - iv) Branch = New Secretariat Road Srinagar.
 - v) IFSC Code = JAKAOPROMPT
 - vi) Code = JAKABBINRSGR – Optional

Name of work & NIT No. shall be clearly mentioned on bank payment receipt for the cost of tender documents, in absence of with the tender bid will be rejected.

5. The bidders shall upload scanned copy of bank payment acknowledgement slip.
6. The bid for the work shall remain open for acceptance for a period of 90 days from the date of opening of bids. If any bidder/ tenderer withdraws his bid/ tender before the said period or makes any modifications in the terms and conditions of the bid, the said earnest money shall stand forfeited.
7. A bidder shall not be permitted to bid for works in the jurisdiction of officer responsible for award and execution of contract in which his or his spouse's near relative (defined as first blood relations, and their spouses) is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Assistant Engineer (both inclusive)
8. No engineer of gazette rank or other Gazetted officer employed in Engineering or Administrative duties in an Engineering department of the State Government is allowed to work as a contractor for a period of two

years after his retirement from Government service, without Government permission. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the government as aforesaid before submission of the tender or engagement in the contractor's service.

9. Other details can be seen in the bidding documents.
10. Any other information regarding e-tendering process can be had from the concerned Office of Deputy General Manager, JKPCCLtd.
11. Rates quoted shall remain valid till completion of work.
12. Instruction to bidders regarding e-tendering process:
 - a) The interested bidder can download the bid from the website <http://jktenders.gov.in>. Bidders are advised to download bid submission manual for the help of bid submission process from the Downloads option as well as from Bidders Manual Kit on website <http://jktenders.gov.in>
 - b) To participate in bidding process, bidders have to get digital signature certificate card as per information technology Act- 2000, to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get above mentioned digital signature certificate card from any approved vendors. The bidders who already possess valid digital signature certificates card, need not to procure new digital signature certificate card.
 - c) The bidders have to submit their bids online in electronic format with digital signature. The bids proposed without digital signature will not be accepted
 - d) Bids will be opened online as per time schedule mentioned in the tender document.
 - e) Before submission of online bids, bidders must ensure that scanned copy of all the necessary documents have been attached with bid
 - f) The department will not be responsible for delay in online submission due to any reasons.
 - g) All required information for bid must be filled and submitted online. The bidder should recheck his online document before submission on line otherwise damaged/ corrupt document shall not be considered in any case.
 - h) The details of hard copies of original instruments in respect of cost of bid Documents & Earnest Money specified in the tender documents should be the same as submitted online otherwise tender will summarily be rejected.
 - i) Bidders are advised to use My Documents area on their used on JK tender e tendering portal to store important documents which are used in all tenders like, sales Tax clearance Certificate etc and attach these certificate as Non Statutory Documents while submitting their bids.
 - j) Bidders are advised not to make any change in BOQ contents or its name in no case they should attempt to create similar BOQ manually. The BOQ downloaded should be used for filling the net item rate inclusive of all taxes and it should be saved with the same with the same name as it contains.
13. Bidders are advised to scan their documents at 100 DPI (Dots per inch) resolutions with Black and white, JPEG scan properly convert scanned images to PDF
14. The guidelines for bidders to submit bid online can be downloaded from website <http://jktenders.gov.in>

15. General Work-Experience:

The Applicant should have the Experience as Prime Contractor of executing one or more similar type of works of providing & fixing of Internal Electrification in preceding five (5) years from Govt./Semi Govt. organizations along with certificate from an officer not below rank of Executive Engineer certifying satisfactory performance of the completed work. The reference date for considering the period of preceding three years for experience is 31-03-2019

Turnover:

The Applicant should have achieved an annual financial turnover of 50% of the advertised amount during any 3 years of proceeding 5 years. Further,

Selection Criteria:

The bidder should have successfully completed 1(One) work of 80% of total Value of the Estimated Cost.

Or

The bidder should have successfully completed 2(Two) work of 60% of total Value of the Estimated Cost.

Or

The bidder should have successfully completed 3(Three) work of 40% of total Value of the Estimated Cost.

16. To qualify for award of the Contract, each bidder should meet the Technical/ Financial Criteria.
17. **If the bidder does not quote rate for any item** of the rate list/quality schedule, Cost of such item/ items shall be deemed to be part of the over all/ total contract value. No rate shall be allowed for such item/ items in the allotment of contract.
18. **Scope of Work:**
The scope includes the cost of all activities including but not limited to providing, fixing, testing and commissioning of internal electrification at site etc. including storage. After successful completion, testing and commissioning, the Electric system is to be handed over to the Owner **with completion certificate for required electric supply connection to the building from State Power Development Department Inspection Wing Jammu (TTIC).**

Essential Document for opening Technical Bid

A. Cost of tender document & EMD.

Bids must be accompanied by scanned copies of bid security and cost of tender document failing which bid will be rejected without giving further notice.

B. Affidavit & Certificates.

1. **Scanned Copy of valid GST** defining constitution/ legal status, place of registration and principal place of Business.
2. **Scanned Copy** of valid PAN.
3. **Scanned Copy** of valid Electrical Contractor License.
4. The bidders shall provide scanned copy of **Notarized Affidavit** on stamp paper along with the bid document with the following undertakings:
 - a. That JKPCC Ltd. is authorized to seek references from Bidders bankers.
 - b. That the bidder would be able to invest a minimum of 25% of Contract Value.
 - c. That the bidder is not black listed/debarred by any Govt. or Semi-Govt. Departments from participation in tendering.
 - d. That bid will remain valid for a period of ninety (90) days from the date of opening of Technical bids.
 - e. Affirming that the information submitted by the bidder with the bid / supporting documents is true & correct to the best of his knowledge and belief.
 - f. The undersigned agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the department/project implementing authority.

C. General Work-Experience:

The Applicant should have the Experience as Prime Contractor of executing one or more similar type of works of providing & fixing of Internal Electrification in preceding five (5) years from Govt./Semi Govt. organizations along with certificate from an officer not below rank of Executive Engineer certifying satisfactory performance of the completed work. The reference date for considering the period of preceding five years for experience is 31-03-2019.

Turnover:

The Applicant should have achieved an annual financial turnover of 50% of the advertised amount during any 3 years of proceeding 5 years.

- a. Other income shall not be considered for arriving at Annual Turnover.
- b. As a proof of turnover, audited Profit & Loss account along with Statutory Auditor's report for last three years is required to be submitted. In case where audited profit and loss account for the immediately preceding year is not available, then a statement of profit and loss account duly certified by the statutory auditors with his comments shall be enclosed with the application along with the copy of appointment letter of the statutory auditor.

Selection Criteria:

The bidder should have successfully completed 1(One) work of 80% of total Value of the Estimated Cost.

Or

The bidder should have successfully completed 2(Two) work of 60% of total Value of the Estimated Cost.

Or

The bidder should have successfully completed 3(Three) work of 40% of total Value of the Estimated Cost.

General Conditions of Contract

1 TIME FOR COMPLETION

The time for completion of the Work, including time required for creation of construction facilities etc, shall be in tandem with civil works.

2 CONSTRUCTION PROGRAMME:

The Bidder shall include in his Bid, the detailed construction programme for executing the work, describing broad Components & Methodology for execution of the work.

3 SITE VISIT

The bidder at his own cost/expenses is advised to visit and examine the Site of Works and its surroundings and obtain for himself on his own responsibility, all information that may be necessary for preparing the bid and entering into a Contract .

Bidders shall familiarize themselves especially with the rules and regulations, local Laws applicable to carry out such Work in J&K. The Owner shall not entertain any request for clarifications from the Bidders, regarding such statutory provisions.

4 BID DOCUMENTS

4.1 The Bid Documents shall comprise Instruction to Bidders (ITB), General Conditions of Contract and Special Conditions of Contract (SCC), Technical Specifications, BOQ and Appendix Forms.

4.2 Amendment to Bid Documents

(a) At any time prior to the deadline for submission of bids, the Owner may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the Bid Documents by issuance of an Addendum .

(b) The Addendum will be sent in writing or by fax/e-mail to all prospective bidders who have been issued the Bid Documents and will be binding upon them. Prospective bidders shall promptly acknowledge receipt thereof to the Owner.

(c) In order to afford prospective bidders reasonable time sufficient to take an Addendum into account in preparing their bids, the Owner may, at its discretion, extend the deadline for the submission of bids .

4.3 Preparation of Bids

(a) The bid shall be in English language only Failure to comply with this shall disqualify a bid .

(b) The Bid must contain the name and places of business of the person or persons making the bid and must be signed by the duly authorized representative with his usual signature and sealed by the Bidder the name(s) and designation(s) of persons signing should also be typed or printed below the signature.

(c) Bid by Companies/Firms/Parties must be furnished with full names of Companies/Firms and be signed by their legally authorized representative(s)

(d) Satisfactory evidence of authority of the person(s) signing on behalf of the Bidder shall be furnished with the bid.

(e) The Bidder's name stated on the proposal shall be the exact legal name of the firm/Company/Parties.

(f) Erasures or other changes in the Bid Document including the proposal documents shall be over the initials of the persons signing the bid.

Bids not conforming to the above requirements of signing are liable to be rejected.

4.4 Specific Issues

(a) A prospective bidder is expected to examine all instructions, terms & conditions, forms and Owner's Specifications/Requirements in the Bid Document and fully inform himself as to all the conditions and matters which may in any way affect the Works, his bid or the cost thereof Further, failure to furnish all information required by the Bid Document or submission of incomplete offers, conditional bids and proposals containing deviations from the Bid Document shall be rejected as non-responsive .

(b) It will be imperative for each Bidder to fully inform himself of all local conditions and factors which may have any effect on the execution of the Works covered under Scope of Works and these Documents .

It would be understood and deemed that such factors have been properly considered by the bidder while submitting the bids Owner accepts no liability for the lack of such clear information or its effect on the cost of the Works to the Bidder .

4.5 Bidders shall assess their requirement of infrastructure and construction facilities to suit their methodology for successful implementation of the work .

Thus, while working out their bid price, the bidders are required to take into account entire scope of the work defined in Bid Documents.

5. PRICE BASES, CURRENCIES

Bidders shall quote their Prices in Indian Rupees in the Performa as given for Schedule of Prices/Bill of Quantity Bidders shall quote for the entire package on a single source responsibility basis. Bidders shall give "Bill of Quantities" and rates covering entire scope of the Works. The prices are fixed No price variation/adjustment shall be allowed in the currency of contract.

The Bidder shall quote his prices logically in bid form. The Bidder is advised to avoid offering of rebate/discount/loading. However, in case of exceptional circumstances, the rebate/discount/loading offered by the Bidder should be only in the Performa of Bill of Quantity. The bidder should offer the rebate on a percentage basis applied uniformly to all the Prices in the Performa given in BOQ.

The quoted rates should be inclusive of all duties, levies, taxes, costs like transportation, handling, insurance etc.

6. SUBMISSION OF BIDS AND

The priced Bill of Quantities / Schedule of Prices need to be submitted online only.

Deadline for Submission of Bids

Hard Copy of Bid shall be acknowledged from L1 only by the Owner at the address specified not later than the last date and time for submission of bids.

The Owner may, in exceptional circumstances and at its discretion, extend the deadline for submission of bids by issuing an Addendum, in which case all rights and obligations of the Owner and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

7. GST REGISTRATION NUMBER:

The successful Bidder shall furnish to the Owner his GST number obtained from commercial taxes department under GST Act. No payment shall be made to the Contractor unless he submits his GST Number

8. VALIDITY OF BID

The bid should be kept valid for acceptance for a period of 90 days from the date of opening of Bids. In exceptional circumstances the Owner may solicit the bidder's consent to an extension of the period of the validity .The request and the response thereto shall be made in writing (including telefax). The Bid Security shall also be extended by the same period as the extension in the validity of the bid. A bidder accepting the request will not be permitted to modify its bid.

9. COMPARISON OF BIDS

Prices quoted by the Bidder for Complete Scope of Work including defect liability period shall be considered for Comparison of Bids.

Taxes and duties

The Bid Prices shall be inclusive of all taxes and duties .The effect of all applicable taxes, duties, other levies and charges etc should be ascertained by the bidder and included in his Bid Price.

10. AWARDS

The Owner will award the Works to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest Evaluated Bid Price.

11. NOTIFICATION OF AWARD (LETTER OF ACCEPTANCE)

Prior to expiration of the period of bid validity, the Owner will notify the successful bidder by tele fax confirmed by registered letter or courier that its bid has been accepted. This letter (hereinafter and in the Conditions of the Contract called the "Letter of Acceptance") shall specify the sum which the Owner will

pay the Contractor in consideration of the execution and completion of the Works and the remedying of any defects therein by the Contractor as prescribed by the Contract.

12. PERMANENT ACCOUNT NUMBER (PAN):

The successful Bidder shall furnish to the Owner his Permanent Account Number issued by the Income Tax Authorities in India .No payment shall be made to the Contractor unless he submits his Permanent Account Number.

13. PERFORMANCE SECURITY:

Within 21 days from the date of issue of Letter of Acceptance, the successful bidder shall furnish to the Owner, Bank Guarantee for amounts equal to 5 per cent (%) of the Contract Price in the form Bid Security which shall be released after Defect Liability Period.

Failure of the successful bidder to comply with the requirement of Clause 15 shall constitute a breach of contract, cause for annulment of the award, forfeiture of the Bid Security, and any such other remedy the Owner may take under the provisions of the Contract.

14. CORRUPT OR FRAUDULENT PRACTICES

It is expected from the Bidders that they will observe the high standard of ethics during the procurement and execution of such Contracts. In pursuance of this policy:

(a) For the purpose of this provision, the terms set-forth below shall mean as under:

(i) **"corrupt practice"** means the offering, giving, receiving or soliciting, directly or indirectly of anything of value to influence the action of a public official in the procurement process or in Contract execution;

(ii) **"Fraudulent practice"** means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a Contract

(iii) **"Collusive practices"** means a scheme or arrangement between two or more bidders with or without the knowledge of the Borrower, designed to establish bid prices at artificial, non-competitive levels;

(iv) **"Coercive practice"** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract;

(b) A bid may be rejected by the Owner if it is determined at any stage that respective bidder has engaged in corrupt or fraudulent or collusive or coercive practices in competing for the Contract in question;

The Owner may declare a firm/Party ineligible, either indefinitely or for a stated period of time, to be awarded a Contract if it at any time determines that the firm /Party has engaged in corrupt or fraudulent or collusive or coercive practices in competing for, or in executing a Contract.

Representative of vendors, suppliers, contractors, consultants, service providers or any other agency (ies) doing any type of business with JKPCCLtd is expected and shall be responsible to ensure that there is no fraudulent act being committed in their areas of responsibility/ control. As soon as he/ she comes to know of any fraud or suspected fraud or any other fraudulent activity must report such incident(s) Such reporting shall be made to the designated Nodal Officer(s), nominated in Project/ Corporate Centre The reporting of the fraud normally should be in writing In case the reporter is not willing to furnish a written statement of fraud but is in a position to give sequential and specific transaction of fraud/ suspected fraud, then the officer receiving the information/ Nodal Officer shall record such details in writing as narrated by the reporter.

15. Contract:

15.1 Following documents shall be attached/annexed to the Agreement and thus form part of the Contract;

- a) General Conditions of Contract.
- b) Bill of Quantities.
- c) Special Conditions of Contract.
- d) Technical Specifications
- e) Letter of Award.
- f) Any other document forming part of the Contract.

15.2 In case of any discrepancy between the documents mentioned in Clause 16.1 above the order of documents shall be as follows:

- i. Letter of Award
- ii. Special Conditions of Contract.
- iii. General Conditions of Contract.
- iv. Technical Specifications
- v. Bill of Quantities.
- vi. Any other document forming part of the Contract.

16. PRICES:

- 16.1 The prices to be quoted by the intending tenderer shall include the supply, installation, testing and commissioning of works at the site, of all component, ancillary material and other items whatsoever required for carrying out the job to fulfill the intent and purposes as laid down in the Technical specifications.
- 16.2 The tenderer's price shall be deemed to include all components. The contractor shall also include, in his price, all taxes duties or other levies (viz. Excise duty, customs duty, works contract tax, sales tax, entry tax, octroi etc..) which are legally livable on supply of equipments & material and its Installation. Failure to include all livable taxes and duties will not entitle the contractor to any extra claims from the Engineer-In-charge. The contractor's rate shall remain firm and fixed during the currency of the contract.
- 16.3 The prices and unit rates quoted by the bidder in the bid shall be firm and deem to be adequate to cover the entire responsibility involved in the execution and completion of work. No Price Variation/adjustment is payable during the currency of Contract. The price shall not be subject to exchange rate variations. No increase due to change in daily wages of labour be paid, due to any reasons whatsoever.
- 16.4 The rates quoted by the Contractor shall be net so as to include all the requirements described in the contract agreement and no claim whatsoever due to fluctuations in the price of materials and labour will be entertained.
- 16.5 The contractor shall provide all equipments, instruments, labour and such other assistance required by the Engineer-in-charge for measurement of the works, materials etc.

17. Temporary Works

Before any temporary works is commenced the contractor shall submit at least 7 days in advance to the Engineer-in-charge for approval of complete drawings of all temporary works he may require for the execution of the works. The contractor shall carry out the modifications relating to strength, if required by the JKPCC/Engineer-in-charge in accordance with the conditions of contract at his own cost. The contractor shall be solely responsible for the stability and safety of all temporary works and unfinished works and for the quality of the permanent works resulting from the arrangement eventually adopted for their execution. For the Civil works like cutting of walls for conduit works or any other job requirement with necessary repairs as per requirements at site including making well the same, the expenditure shall be borne by the agency/contractor. Contractor shall quote rates accordingly. Nothing extra shall be paid on this account.

18. Water, Power and Other Facilities:

- a) Raw water supply is available at site which the contractor can use for any constructional needs. However for drinking water Contractor shall have to make their own arrangement at their own cost.
- a) Metered JKPDD power supply shall be made available to the contractor who shall have to pay the JKPCC/Engineer-in-charge for energy consumed on per month basis. Generator back up if required shall have to be arranged by the contractor at their own cost.

19. Accommodation:

- a) The contractor shall provide and maintain all necessary offices, workshops, stores, shelters, sanitary facilities, canteens and other temporary structures for themselves in connection with the work at the site at their own cost after getting the approval from the JKPCC.
- b) All temporary buildings and facilities as mentioned above shall be removed on completion of the work or at any other earlier date as directed by the JKPCC.
- c) Watch & ward shall be responsibility of the contractor till the completion of job.

20. Facilities for contractor's employees

The contractor shall make his own arrangement for the housing and welfare of his staff and workmen including adequate drinking water facilities. The contractor shall also make the arrangements at his own cost for transport where necessary for his staff and workmen to and from site of work at his own cost.

21. Liquidation of damages

0.25% of contract value for every week of the delay after the schedule date of completion of work to the contractor will be charged. Total recovery amount shall be maximum upto 5%.

22. Disposal of Refuse

The contractor shall cart away all debris, refuse etc arising from the work from the site and deposit the same as directed by the Engineer-in-charge at his own cost. It is the responsibility of the contractor to obtain from the local authorities concerned to the effect that all rubbish arising out of contractor's activities at the construction site or any other off-site activities borrow pits has been properly disposed off.

23. Tools, Storage of Materials, Protective Works and Site Office Requirements

The contractor shall provide, fix up and maintain in an approved position proper office accommodation for the contractor's representative and staff which offices shall be open at all reasonable hours to receive instruction notices or communications and for storage of tools, etc and clear away the same on completion of the works and make good all work disturbed.

All drawings maintained on the site are to be carefully mounted on boards of appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants, and other insects and made available to the JKPCC for inspection or such other purposes they may require.

The contractor shall provide at his own cost all artificial light required to complete the work within the specified time.

The contractor shall provide a suitable temporary hut for the watchmen and clear away the same when no longer required and to provide all necessary attendance, lights etc required.

The contractor shall arrange for temporary latrines for the use of workers and field staff and keep the same in a clean and sanitary condition to the satisfaction of the Public Health Authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the works disturbed by these conveniences.

Every precaution shall be taken by the contractor to prevent the breeding of mosquitoes on the works during the construction, and all receptacles, cistern, water tanks etc used for the storage of water must be suitably protected against breeding of mosquitoes. The contractor shall indemnify the JKPCC against any breach of rules in respect of anti-malarial measures.

The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed or upon any boarding gantry, building structures other than those approved by the JKPCC.

Protective Measures: The contractor from time to time of being placed possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

Contractor shall indemnify the JKPCC against any possible damage to the building, roads, or members of the public in course of execution of the work.

The contractor shall provide necessary temporary enclosures, gates, entrances etc for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

Storage of Materials: The contractor shall provide and maintain proper sheds for the proper storage and adequate protection of materials etc and other work that may be executed on the site including the tools and materials of nominated sub-contractors and remove same on completion.

So also, steel materials are to be stored above the ground level to prevent the same from getting rusted.

24. Tools:

All measuring tapes shall be of steel. Suitable scaffolding and ladders that may be required for safe working and taking measurement shall be supplied by the contractor.

Supervisors on the works shall always carry with them a one metre or two metre steel tape, a measuring tape of 30 meters, a spirit level and shall check the work to see that the work is being done according to the drawing and specifications. Supervisors shall also carry one test lamp with leads and one neon tester

and necessary working instruments. The Site Engineer will use any or all measuring instruments or tools belonging to the contractors as he chooses for checking the works executed or being executed on the contract. The contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc for their work.

25. Idle Labour:

Whatever the reasons may be no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

26. Variation in quantities:

The quantities for ancillary works given in the schedule and / or in drawings are for the guidance of the tenderer. The contractor shall be paid on the basis of actual quantities of works carried out. However the contractor shall check these quantities before quoting and will bring to the notice of Consultants / Engineer-In charge for any major variation. The contract shall be on works contract basis and the Client reserves the right to add / delete any items of work during the currency of contract.

When there is likelihood of major variation in the quantity of any item after the finalization of design/drawings, the Contractor shall submit the details of such variation with proper Justification for approval of Engineer-in-charge. Payment of such deviated quantities shall only be made after approval of Engineer-in-charge.

27. Excise Duty, Taxes, Levies etc

The contractor shall pay and be responsible for payment of all taxes, including GST & other taxes as applicable, duties, levies, royalties, fees, cess or charges in respect of the works including but not limited to GST, works contract tax, customs duty, excise duty and octroi, payable in respect of materials, equipment plant and other things required for the contractor. All of the aforesaid taxes, duties, levies, fees and charges shall be to the contractor's account and the JKPC shall not be required to pay any additional or extra amount on this account. If there occurs any Variation of taxes, duties, fees, levies etc or introduction of new Tax or duty or levy or cess imposed under any Statute or Law, after 15 days prior to last date of submission of Bids, during the currency of contract which causes additional or reduced cost to the contractor, the same shall be intimated by the contractor to the owner and shall be paid/recovered to/from the contractor.

28. Approved Make:

The Material/Equipment/Machinery to be supplied and installed for Electric system Works shall be of Approved make as specified in Technical Specifications. The List of Approved makes and manufacturers is Annexed to Technical Specifications.

29. Working Drawings, Maintenance Manuals etc.:

On the award of the work, the contractor shall immediately proceed with the preparation of detailed shop drawings prepared on the computer through the Auto CAD system based on the architectural drawings and site measurement, detailing the components that are to be installed and the ancillary works that are to be carried out. Three sets of all such schematic drawings shall be submitted to the Engineer-In-charge, for their approval as provided in General Conditions of Contract to ensure that the works will be carried out in accordance with the specifications and drawings, including such changes as may have been mutually agreed upon. All the drawings shall be received by the Engineer in-charge for their approval, within two weeks of the award of work. The approval of the drawings by the Engineer-In-charge shall in no way relieve the contractor from his obligations to provide a complete and satisfactory System and installation as per intent and purpose as laid down in the specifications. Any omissions and/or errors shall be made good or rectified whether or not the drawings are approved.

Prior to the completion of the work, the contractor shall furnish (4) four sets of a comprehensive manual, describing all components, furnishing a list of instructions for the operations and maintenance of the system.

When the Engineer-In-charge makes any amendments in the above drawings, the contractor shall supply two fresh sets of drawings with the amendments duly incorporated along with check prints for approval.

Within four weeks of approval of all the relevant shop drawings, the contractor shall submit four copies of a comprehensive variation in the quantity statement. The contractor shall also fix in the control room neatly typed and framed, instruction in details, for the starting and running of the system. Any special tools required for the operation or the maintenance of the system shall be supplied free.

30. Supply, Installation, Testing and Commissioning:

The contractor shall carry out the complete supply, installation, testing and commissioning. All work shall commence on previously prepared locations for the main and sub systems. All the materials shall be moved from their place of storage into the system by the contractor. The contractor shall make his own arrangement to off load materials received at respective Air/Rail/Road transport terminal points, dispatch to site and to store all material received at site. The Engineer-In-charge shall provide clear storage and installation space only. All installation tools and tackles as and when required to suit the installation programme shall be provided by the contractor. All consumables required for installations such scaffolding etc. shall be provided by the contractor. Protective and finish painting shall be carried out by the contractor. The contractor shall indicate the electricity requirements during installation. The contractor shall remove all the waste material or rubbish from and about the work site and leave the job thoroughly cleaned up and ready for use.

31. Testing:

31.1 All types of routines and type tests as required shall be carried out at the works of the contractor or the manufacturers of the components. The routine tests will be carried out in presence of third party inspection viz. CEIL or CPRI in presence of Engineer in charge or his representatives. The inspection Certificate/Release note of the third party inspection agency should be finalized by Dy. General Manager Unit-Electrical, JKPCCLtd. The inspection charges should be borne by the contractor.

31.2 On the completion of the installation, the contractors shall arrange to carry out various initial tests as detailed in below, in the presence of and to the complete satisfaction of the Engineer-In-charge or their representatives. Any defects or shortcomings found during the tests shall be speedily rectified or made good by the contractor at his own expenses.

31.3 The initial tests shall include but not be limited to the following:

31.4 To operate and check the proper functioning of all electrically operated components.

31.5 On the satisfactory completion of all 'Initial' tests the work shall be considered to be 'virtually complete' for the purpose of taking over by the Engineer-In-charge.

32. Rejection of Defective System:

If on test any portion of the system or components are found to be defective or not fulfilling the intent or the meaning of the specifications, the same shall be replaced or repaired to the entire satisfaction of the Engineer In-charge.

In case the contractor fails to remove the defects, within a period considered reasonable, the Engineer In-charge reserves the right to take necessary remedial measures through other agencies and all expenses thus incurred would be recovered from the contractor.

The Engineer In-charge reserves the right to operate all the equipment and complete system whether or not the Equipment is taken over after the initial test and commissioning. Any defects found during the initial or running tests shall be removed at a suitable time as decided upon by the Engineer In-charge.

33. Maintenance of the system and training of personnel:

The contractor shall arrange to provide at no extra cost operation and comprehensive maintenance of the entire electrical system of the building, regularly during defect liability period for a period of 12 Months (twelve months) from the date of commissioning (or 18 months from date of completion).

34. Completeness of the Works:

The contractor shall provide all the required materials, equipment, ancillary items etc. whether or not each and every item is mentioned in the specifications. Any shortcomings noticed at any stage shall be made good at no extra cost.

35. Warranty and Guarantee:

The contractor shall guarantee that all the material, machinery and components supplied, installed, fabricated by him shall be free from defects due to faulty design material and/or workmanship, that the system shall perform satisfactorily and the efficiency and functioning system of the system and all the components shall not be less than the parameters laid down in the specifications and the performance shall be within the specified design limits. In case of any shortcoming the contractor shall replace the necessary components/items at no extra cost or alternately the Engineer In-charge shall be entitled to deduct a proportionate amount from payments due to the contractor.

The period of the guarantee shall be minimum of 12 Months/manufacturer's warranty (whichever is more) from the date of commissioning during which period any or all components found to be defective shall be replaced or repaired free of charge and any shortcomings found in the system functioning as specified shall be removed at no extra cost. The contractor shall provide the necessary personnel and tools for fulfilling the above guarantee.

If for any reason the commissioning of the system cannot be carried out due to reasons attributable solely to the Engineer- In-charge, then the system shall carry a guarantee for a period of 18 Months from the date of 'virtual completion' - a date which shall be certified by Engineer In-charge.

If the defects are not removed within a reasonable time the Engineer In-charge may arrange to do so at the contractor's risk and cost, without prejudice to any other rights.

36. Safe custody and storage:

Safe custody of all equipments/items supplied by the contractor shall be his own responsibility till the final taking over by the Engineer In-charge. He should, therefore, employ sufficient staff for watch and ward at his own expenses. The Engineer In-charge may, however, allow the contractor to use the Equipment room/rooms etc. for temporary storage of his equipment if such spaces are ready and available.

37. Spares:

The Contractor guarantees to the Owner the supply of spares during defect liability period.

38. Operation and Maintenance (O&M):

The Contractor shall provide all inclusive Operation and Maintenance (O&M) of installed electric system during the defect liability period inclusive of all material, labour and any other costs, as specified in the Contract, after commissioning of Plant/system at no extra cost to the Owner.

39. Site Visit:

The bidders are strongly advised to visit and examine the existing infrastructure and obtain, on their own responsibility, all information that may be necessary for preparing the Bid and entering into a Contract. The costs of visiting the sites shall be at bidders own expenses. JKPCC Ltd will assist for site visit in working days (Monday – Friday) between 9.30 AM to 4.00 PM.

40. Labour laws and safety regulations:

The Contractor will be required to make good for any damage caused during the awarded work. Any injury / casualty to any skilled / unskilled worker during the work execution will be the entire responsibility of the Supplier / Vendor and your labour should be duly insured. Contractor will be responsible for the compliance of the provisions of the various central & State enacted labour laws whichever is applicable to workmen deployed by the contractor party in relation with the subject services.

Special Condition of the Contract

1. Penalty for delay in completion:-

0.25% of contract value for every week of the delay after the schedule date of completion of work to the contractor will be charged. Total recovery amount shall be maximum up to 5%.

2. Time extension:-

Suitable time extension shall be granted in case of increase in scope of work and in the event of delay beyond control of contractor to be determined by the department. The tender receiving authority reserves the right to accept or reject any tender or all tenders without assigning any reason thereof.

3. Restoration of work: -

On completion of contract the contractor shall be responsible to remove all un-used material and restore the site in its original position at his own cost.

4. Defect Liability period:-

The DLP shall be calculated from date of certified completion of work and period shall be 12 months from the date of taking over of the work (or 18 months from date of completion of work to be certified by JKPCCLtd.) and removal of defects after conducting necessary repair to the entire satisfaction of the Engineer-in-charge.

5. Safety

The contractor shall be responsible for safety of all men, material and machinery at site of work. He shall submit the insurance certificates in this regard within One month of date of allotment.

6. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the site shall be the property of the Govt.

7. Tests

The contractor shall be solely responsible for carrying out the mandatory tests required for the quality control at his own cost and shall submit a test report regarding the physical/ chemical properties as well as structural strength of material.

8. Termination

The employer may terminate the contract if the contractor causes a fundamental breach of the contract. Fundamental breach of contract will include:-

- i. Continuous stoppage of Work for a period of 15 days without authorization of Engineer in-charge.
- ii. Contractor is declared bankrupt.
- iii. Any evidence of involvement of contractor in corrupt practices.
- iv. Contractor delays the completion of work beyond stipulated time of completion.
- v. If In case contractor fails to start /complete the work, within the stipulated time period, his CDR/Earnest Money shall be forfeited after termination of the contract. Besides, defaulting contractor shall be debarred from taking works in JKPCCLtd., at least for two years and shall be recommended for blacklisting as well.

Pursuant to the process of termination of defaulted contract, the employer reserves the right to invite fresh tender for the balance work at the risk and cost of defaulter contractor

The date of start of the work shall be reckoned within 07 Days from the date of issuance of LOI/Contract allotment as the case may be.

9. MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENT ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK:-

- a) Compliance with Labour Regulation Laws of J&K State.

10. Specification/Quality Control:-

All items of works shall conform to specifications as per BOQ

11. Insurance:-

Insurance cover to Labour / Machinery / Work / Plant material / Equipment by the contractor shall be mandatory.

12. Laws Governing the Contract:-

The contract shall be governed by Laws of the land.

13. Court's Jurisdiction:-In case of any disputes/differences between contractor and Department the jurisdiction shall be J&K State

14. All other terms and conditions are as same as are in vogue in JKPCCLtd.

15. Other conditions:

- i. The contractor/ agency failing to execute the work in part or in full. Action will be taken against him according to the following conditions:-
 - a. A registered notice or notices sent through special messenger by the Engineer I/c to the contractor for non-start of work will amount to breach of contract.
 - b. The corporation may execute the work left by the contractor at his risk and cost. Any additional amount involved for execution of work will be recovered from other claims/resources of the contractor available with the corporation.
 - c. In case contractor evades the receipt of notice or deliberately gives wrong address for the communication where it is not possible to deliver registered letter, the notice will be pasted on the entry gate of his premises in presence of a witness. This will be treated as notice being served upon the contractor.
- ii. Tenderer shall not be entitled for any claim what so ever on account of expenses incurred by him on submission of the tender.
- iii. All terms and conditions of NIT/ Agreement to be drawn by the contractor/ agencies shall be binding upon the contractor/ agencies as soon as the allotment of contract is awarded in favour of contractor/ agency. The terms and conditions contained in other similar nature of contracts of this corporation shall also be applicable.
- iv. Misconduct/ Misbehavior observed during the tender opening process, during the execution of work with any officer / official shall be dealt under rules. He shall be disqualified in the tendering process / his contract shall be liable for termination.
- v. The accepting authority reserves the right to accept or reject any or all the tender before or after their opening after assigning reason thereof. The allotting authority in view of exceptional circumstances reserves the right of granting the contract to any of the tenderer it deems proper in the interest of the work.
- vi. The successful tenderer will abide by all labour laws and will be personally responsible for any casualty/ eventuality/ accident during the period of contract. For such eventualities he will have to insure his all workmen and machinery deployed on the work.
- vii. The watch & ward of the material during execution shall be sole responsibility of the successful tenderer.

16. Performance security (unbalanced bids)

If the bid of the successful bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract the employer may require the bidder to produce detailed price analysis for any or all items of the bill of quantities to demonstrate the internal consistency of these prices with the construction methods.

In case the bid of the lowest bidder is found unbalance the successful bid shall have to produce additional performance security (which shall be release after DLP) in the shape of CDR /FDR /BG within 21 days of opening of price bid as per the following break-up:

S. No.	%-age of unbalanced bid with advertised cost	Additional performance security to be deposited
1	Up to & including 15% below	NIL
2	Greater than 15% below up to 30% below	3%
3	Greater than 30% below	5%

17. Deviation items:

No deviation items shall be executed by the contractor unless until it is approved in writing by the engineer-in-charge (i.e., Dy. General Manager).

18. Security Deposit

- a) The earnest money of the successful tenderer shall be released after submission of Performance Security.

- b) 5% security deposit deductions shall be made from all interim bills including final bill.
- c) This security deposit at the credit of the contractor alongwith the Performance security shall be refunded to the contractor after the date of expiry of defect liability period of 12 months from the date of taking over of the work (or 18 months from date of completion) and removal of defects after conducting necessary repair to the entire satisfaction of the Engineer-in-charge.
- d) The security deposit shall not bear any interest.
- e) The security deposit shall be liable to forfeit as per the discretion of the Engineer-in-charge if the contractor fails to carry out work or perform/ observe any of the conditions of the contract.

19. Time of completion

The time being essence of any contract, the work is to be completed in tandem with Civil works.

20. Replacement of defective work and material

The contractor shall also be personally liable for civil and criminal prosecution under law if the specifications of the materials used are found in contravention to the specification prescribed during execution of the work even after completion and finalization of the contract i.e., at any stage during the prescribed life of the structure.

The tenderers shall in their own interest examine the conditions of the contract and specifications of the work. They shall also inspect the site and satisfy themselves (on their own) as to the climate and other conditions prevailing at the site. The nature and extent of the work, all existing and required roads and other mean of communication and access to site, availability of housing and other facilities, availability of different material, labour and probable sites, for labour camps, stores and godowns etc. They shall themselves obtain all necessary information as to the risks, contingencies and other circumstances which may affect or influence their tender, No extra charges consequent to any misunderstanding or otherwise no on this account shall be allowed.

21. PAYMENTS SCHEDULE.

All the payments during execution of work shall be based on the actual measurement.

Note:

- a) The cost of works already executed shall be deducted from the bill.
- b) Any item of work not included BOQ but found necessary shall be paid as per OEM rate list or LMR whichever applicable and the decision of Engineer I/C regarding rates shall be binding upon the Bidder.

22. DRAWINGS AND PHOTOGRAPHS OF THE WORKS

The contractor shall do photograph /video photograph of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work and lastly after the completion of the work. No separate payment will be made to the contractor for this and shall submit a Hard copy and soft copy of the same to the Engineer-in-charge for record and reference.

The contractor shall not disclose details of drawings furnished to him and works on which he is engaged without the prior approval of the Engineer-in-Charge in writing. No photograph of the works or any part thereof or plant employed therein, except those permitted shall be taken or permitted by the contractor to be taken by any of his employees or any employees of his sub-contractors without the prior approval of the Engineer-in-Charge in writing. No Photographs /Video photography shall be published or otherwise circulated without the approval of the Engineer-in-Charge in writing.

GENERAL TECHNICAL SPECIFICATION

GENERAL SPECIFICATION

1. The work in general shall be carried out as per CPWD specifications, 1996 (volume I to VI) (updated with correction slips issued up to last date of submission of tender) 1994 for Electrical works (Internal) and 1995 for Electrical works (External) (updated with correction slips issued up to last date of submission of tender).
2. All Electrical installation shall comply with the requirements of Indian Electricity rules, 1956 and Indian Electricity Act-1910 as amended up to date and bye laws of authority of State Government or any other department.
3. All electrical works will conform to various Indian Codes as listed in the Technical Specifications.
4. For the items not covered under the specifications as stated above, the work shall be done as per relevant IS Codes.
5. For the items not covered under any of the specifications stated herewith, the work shall be executed as per Manufacturer's specifications/ General Engineering Practice and / or as per direction of Engineer in Charge.

6. **ADDITIONAL PARTICULAR SPECIFICATION**

In the absence of any definite provisions or any particular issue in the aforesaid specification, reference to be made to the latest codes and specifications of BIS, IRC, BS, ASTM, AASHTO and CAN/CAS in that order. Where even these are silent, the construction and completion of works shall conform to sound Engineering practice as approved by Engineer in Charge. In case of any dispute arises out of the interpretation of the above, the decision of the Engineer in charge shall be final and binding on the contractor. Where ever reference is made in the contract to specific standard codes to be met by the materials, plants and other supplies to be furnished and work performed and tested, the latest edition or revision of the relevant codes in effect shall apply, unless otherwise explicitly stated in the contract. Where such standards and codes are national or related to a particular country of region, other internationally recognized standards which ensure a substantially equal or higher performance than the standards and codes specified will be accepted subject to the Engineer in charge prior review and written approval. Differences between standards must be fully described in writing by the contractor and submitted to the Engineer in Charge at least 15 days prior to the date when contractor desires the Engineer in Charge's approval. If the Engineer in Charge determines that such proposed deviation do not ensure substantially equal performance, the contractor shall comply with the standards specified in the documents.

7. **TECHNICAL SPECIFICATION FOR ELECTRICAL WORK**

GENERAL

The power supply system in the building shall be made available at 415/240 Volts, 50 Hz., A.C. 3 phase 4 wire, earthed neutral from local Electric Supply Authority

All supply and installation work shall be carried out as per specification and in accordance with the construction drawings and shall conform to requirements called for in the Indian Electricity Rules 1956 with its latest amendment, Indian Electricity Acts and all relevant codes and practices issued by the Bureau of Indian Standard as amended up-to-date. The work shall also comply with the provisions of the general or local set of legislatures and regulations of any local or other statutory authority which may be applicable.

The Contractor for electrical work must possess valid Electrical contractor's License endorsed by the Licensing Board, Directorate of Electricity of concerned State Government for the type of work he shall execute or piece workers as specified herewith

The work to be provided for by the Contractor, unless otherwise specified, shall include but not limited to the following:

- a) Furnish all labour, supervision, services, materials, supports, scaffolds, construction equipment, tools, plants and transportation etc required for the proper execution of the job as per drawings, specification and schedule of items and get all necessary tests on materials and work conducted at their cost.
- b) Notwithstanding the electrical layout shown in the drawing, the contractor shall obtain further approval of the layout at site from the Consultant / Engineer- in- Charge before commencement of the work.
- c) Furnish samples of materials on display board at site for approval including arranging necessary tests on samples, as directed by the Consultant / Engineer-in -charge in an approved Laboratory.
- d) To extend facilities to the Consultant / Engineer-in- Charge to inspect work and assist them to obtain samples, if they so desire.

- e) Furnish general arrangement drawings of the switchboard and other fabrication items, which the Consultant / Engineer- in- charge may direct for their approval.
- f) To employ a full time experienced supervisor having electrical supervisor's certificate of competency endorsed by the Licensing Board, Directorate of Electricity of concerned State to supervise the work. The Consultant / Engineer- in -Charge have the right to stop the work if the contractor's supervisor is not present when the work is being carried out.
- g) To keep the appropriate Electrical Inspector & supply authority be informed from time to time as per the execution programme of the work shall be the responsibility of the contractor and he shall be responsible to ensuring that all work passes their approval.
- h) To provide all incidental items not shown or specified in particular but necessary for proper execution of works in accordance with the drawing, specification and schedule of items.
- i) To maintain the work and keep them maintained till handed over to the owner in proper working condition. Coordinate with all agencies including those engaged by the owner for proper execution of the job.

8. MATERIALS

Materials shall be of the approved make & quality. A list of materials of approved brand and manufacturer is indicated herewith at **APPENDIX –A**. If the list of materials mentioned stipulates two or more or alternative brands/makes of any product, the decision as to which brand/make shall be used in the work shall be taken by the site engineer and the contractor shall provide the brand/make so selected without any extra cost.

In case, materials are required to be obtained from any manufacturer other than those listed on account of non -availability then prior approval from Consultant will be necessary, supported by relevant test certificates qualifying the required standard. Further tests as directed by the Consultant shall also be carried out by the contractor at their own cost, if required.

Contractor shall obtain approval from the Consultant/ Employer of sample of all materials before placing order and the approved sample shall be carefully preserved on the display board in an appropriate manner at the site office for verification by the Consultant/ Employer.

For standard bought out items, the sizes manufactured by the firms listed shall prevail when there is discrepancy in the sizes mentioned in the schedule without any financial adjustment.

9. SPECIFICATIONS

Unless specifically mentioned otherwise, all applicable codes and standards published by the Bureau of Indian Standard and all other such publication as may be published by them after construction work starts, shall govern in respect of design, workmanship, quality and properties of material and method of testing.

10. SAFETY

All equipment shall be complete with approved safety devices wherever a potential hazard to personnel exists and with provision for safe access of personnel to and around equipment for operation and maintenance functions.

Special care shall be taken to ensure against entry of rats, lizards and other creeping reptiles which may create electrical short circuit inside live equipment.

11. DRAWINGS

On completion of all work the contractor shall furnish three copies of Ammonia print along with the original tracing of the following "As built" drawings to the Consultant without any extra cost.

- i. Wiring diagram for final power / lighting distribution system showing the rating/ size of switchgear, cables, conduits, lighting fixtures and all accessories for individual installation.
- ii. Detailed general arrangement drawings of the switchboard complete with dimension in metric units.
- iii. Drawings showing the route of conduits and cables with sizes, lengths, sources and destination of all cables with the circuit designation number, etc.
- iv. Drawings showing the balancing of phases with connected load in each circuits, etc.

12. TEST CERTIFICATES AND INSTRUCTIONS

Unless specifically mentioned otherwise, the contractor shall furnish, in duplicate, Manufacturer's Test Certificate with the delivery of the equipment to the site and Instruction Manual in English for operations and maintenance of equipment wherever required.

13. TESTING AND COMMISSIONING

Before each field test, the contractor shall obtain the permission from the site engineer and all tests shall be conducted in the presence of duly authorised representative. Records of each test shall be prepared immediately after the test and this record shall be signed by contractor's representative conducting the test and the site engineer attending the test. Copies of their record in quadruplicate shall be handed over to the Engineer-in-Charge.

Supply Authorities. Recommended completion certificate's Format is given in Appendix 'A'.

14. COMPLETION OF WORK

Each item of the electrical work shall be considered as complete in all respects only after obtaining permanent service connection from local power supply authority, energizing, testing and final commissioning of the complete installation as directed by the Consultant/Engineer-in-Charge.

Payment on each item of electrical work shall be made as per measurement and proportionate to the quantum of work completed. In the event of any dispute with regard to the proportion of work complete, the decision of the Engineer-in-Charge shall be final and binding to the contractor.

15. PREAMBLE TO THE SCHEDULE OF WORK

The successful tenderer shall carefully go through the Clauses of Invitation to Tender, Specification, Schedule of Work and drawings and shall include in his rates any sum he may consider necessary to cover the fulfilment of the various clauses contained therein. Unit prices stated in the schedule of work against the item of work shall be inclusive of all installation, accessories and consumables necessary to complete the said work within the contemplation of the contract. Beyond the unit prices no extra amount will be paid for incidental contingent work and materials.

The quantities mentioned in the schedule of work are probable quantities and it must be clearly understood that the contract is not a lump sum contract, that the probable quantities, the value of the entire tender are only indicative and Employer does not in any way assure the tenderer or guarantee that the actual quantity of work would correspond to the probable quantities in the tender.

No change in unit rate will be admissible on any variation of quantity.

16. SPECIFICATION FOR WIRING SYSTEM

This specification covers supply of materials, erection and commissioning of distribution wiring, connection to distribution boards, cable laying, earthing and miscellaneous items. Applicable provisions and conditions of contract shall govern the work under the section.

17. GENERAL

Work to be provided for by the Contractor, unless otherwise specified, shall include but not be limited to the following:

- a) Furnishing of labour, materials, supports, scaffolds, transportation, etc required for the work.
- b) To provide all incidental items not shown or specified in particular but reasonably be implied or necessary for successful completion of the work in connection with the drawings, specification and schedule of items.
- c) To provide all supervision for proper execution of the work.
- d) To conduct and bear all costs in respect of any test advised.

After completion of supply and installation of wiring system and earthing, if any defect in the material or workmanship is found by the Consultant /Engineer-in-Charge, the contractor shall remove the same and supply better and approved materials at his own cost. All precaution against theft and fire shall also be taken by the contractor.

18. MATERIALS

All materials used in the work shall be of approved make (list enclosed herewith at APPENDEX –A) & in its absence conforming with IS specification after approval of Engineer-in-Charge.

19. WIRING SYSTEM

The electric load of all lights, power outlets, etc. shall be balanced across the three phases. Generally the final loading of any sub-circuit for lights and fans shall not exceed 800 watts and shall not be connected to more than total 5 fans, lights, socket outlets, etc. Bell push if operated at low voltage shall be fed from a separate circuit of distribution board. The 16 Amps sub-circuit for power shall be connected to a maximum one 16 Amp socket outlet or two 6 Amp socket outlets. A power circuit shall always be originating from a distribution board or MCB DB and the same shall run in a separate conduit.

The point wiring shall mean wiring from one way of distribution board to point of utilization of electricity i.e. where the load is applied and this shall include complete wiring from distribution board, supply and fixing of switch board, controlling switches, ceiling rose, batten holder and socket outlet, etc.

Insulated or covered earthing conductors where used, shall have green insulation braiding or covering as appropriate. Under no circumstances shall the colour green be used for other than earthing conductor. In addition where it is required, cables of different colours be used. For identification purposes the following system shall be employed:

Red or any colour (other than black or green)	For phase or switch wire
Black	For Neutral
Green	For earth

Unless otherwise mentioned in the schedule of quantities, single way porcelain/ Bakelite terminal connectors with nickel plated brass inserts and screws to suit the conductor size shall be used for intermediate wiring/ joints in junction boxes and in switch boards or by any other method approved by the Consultant/ Engineer- in- Charge.

Distribution wiring in conduit to light, fan, plug points etc. shall be done in looping in system. In this system, no joints or connections shall be made anywhere of the system except at terminating points such as, at terminals of switches, ceiling roses, etc. and in case of socket outlets, at the socket terminals. Intermediate wiring joints of neutral wire in junction boxes will not be permitted. All intermediate joints or connections shall be made in the switch board only. Intermediate wiring joints of neutral wire in the junction box will not be permitted.

20. CONDUIT WIRING

Where specified, P.V.C. conduit conforming to IS: 9537 (Part-III)-1983 shall be used. The thickness of P.V.C. conduit shall be adequate to withstand mechanical injuries. PVC conduit accessories conforming to IS: 3419-1988 shall be used along with P V C conduit.

21. CONCEALED WIRING

This system of wiring shall comply with all the requirements of surface conduit wiring system specified in Causes 5.1 to 5.6 in addition to the following points:

- a) **Making of chase:** The chase in the wall shall be filled up neatly made and be of ample dimensions to permit the conduit to be fixed in the manner desired. In case of buildings under construction, chases shall be provided in the wall, ceiling etc. at the time of their construction and shall be filled up neatly after erection of conduit and brought to the original finish of the wall. Especially for ceiling, conduit shall be laid before casting.
- b) **Fixing of conduit in chase:** The conduit in chase in the wall shall be fixed by means of staples or by means of saddles not more than 60 cm apart. Fixing of standard bends or elbows shall be avoided as far as practicable and all curves maintained by bending the conduit pipe itself with a long radius which will permit easy drawing of PVC insulated wires.
- c) **Inspection boxes:** Suitable inspection boxes shall be provided to permit periodical inspection and to facilitate removal of wires, if necessary. These shall be provided with inspection box covers.
- d) **Types of accessories to be used:** All outlets, such as switches, wall sockets, etc. may be either flush mounting type or of surface mounting type. The outlet box shall be mounted flush with the wall. The metal box shall be effectively earthed by an approved means of earth attachment.

Conduit laying in floor/ roof slabs before casting:

PVC (as specified in BOQ) shall be laid straight as far as practicable and properly placed including binding with the steel reinforcement rods with 22 SWG G.I. binding wire so that proper positions of conduits are maintained.

While laying the conduits for concealed wiring in the ceiling / beams / columns / walls before casting, the contractor shall ensure that both ends of the conduit are plugged by means of dead-end sockets or otherwise to prevent the entry of any foreign material against conduit choking.

All precaution must be taken while laying the conduits in the slabs, R.C. walls, columns, etc. and the contractor shall rectify at his own cost, if any defects are found during process of drawing cables through the concealed pre-laid conduits.

Each rigid PVC conduit shall be provided with protruding length of 150 mm on free end of the conduits under the bottom level of slab/ beam.

There shall be no intermediate joints in one straight run of conduit.

All ceiling outlets shall be terminated in a round M.S./ G.I. PVC circular box (80 mm depth minimum)/ deep box to suit standard size ceiling rose or/ and rectangular M.S. junction box or Fan Hook Box as the case may be.

It will be mandatory for the contractor to get the layouts approved by the Engineer- in- charge/Consultant, measurements are checked when the conduits are laid and bound to steel reinforcement rods, before he can release the work for casting of slabs/ floor/ beams etc.

Fan Hook Box:

These shall be 100mm dia x 80mm depth, constructed from 14 SWG M.S. sheet and provided with one 12 mm dia. M.S. rod of 300mm long having 'U' bend inside the box.

Wires:

Unless otherwise mentioned in the schedule of quantities, only single core PVC insulated / PVC insulated & sheathed cable consisting of multistrand / flexible copper conductor and of approved manufacturers conforming to relevant I.S. shall be used for wiring in conduit system..

22. INSTALLATION AND WIRING OF DISTRIBUTION BOARD/ MCB DISTRIBUTION BOARD.

Where the fixing of Distribution board/ MCB DB will be of concealed type, the chase in the wall shall be neatly made and be of ample dimensions to permit the DB to be recessed in wall and flushed with finished wall surface.

The cable / wires shall be connected to the terminal only by doubly crimped lugs .

23. EARTHING

All non current carrying metallic part of various electrical equipments as well as cable armouring, metallic conduit, cable racks/ trays, brackets, supporting structures, etc. shall be effectively earthed by not less than two separate and distinct earth connection in accordance with Indian Electricity Rules, and the relevant Indian Code of Practice for earthing 3043-1987.

EARTH ELECTRODE/ PIPE ELECTRODE

The earth electrode for earthing station shall comprise G.I. pipe 'B' Class of 50mm internal diameter and 3 mtr. long in one single piece with holes 12mm dia on all sides at 150 mm centre, up to a minimum height of 2.5 meter from bottom. Removable caps / wire mesh funnel shall be provided at the top of pipe to facilitate pouring of water. Suitable clamps made of 40mm x 6mm galvanised M.S. flats complete with bolt and nut shall be provided with the electrodes at 100 mm from the top end for connecting earth conductor. No joints will be allowed in the earth electrode. The electrode shall be driven at least 2 meter clear from masonry structure and the distance between two electrode shall be not less than 2 meter when installed in parallel and preferably placed twice the length of the electrode i.e. 6 meter. A masonry inspection pit of inside dimension 300mm x 300mm x 300mm deep (unless otherwise stated) shall be built with 125 mm thick cement mortar (6:1) brick work both inside and outside plastered with 20mm thick and neatly cemented 1.5 mm thick, inside top and outside around the top of the earth pit, so that the top of the G.I. pipe is 250 mm below the finished ground level and the opening on top shall be provided with C.I. manhole ring having lockable C.I. cover fixed & flush with the outside finished ground level.

PLATE ELECTRODE

Where plate electrode for earthing is to be employed, the size of the plate shall not be less than 600 mm x 600 mm x 6.3 mm for G.I. plate in thickness and 600 mm x 600 mm x 3.15 mm thickness in case of copper plate.

The plate shall have a drilled hole 14 mm dia. at the centre. The G.I. flat of not less than 40 mm x 6 mm (1 no. 25 mm x 6 mm G.I. flat for lightning conductor installation) should be connected to the plate by means of a 65 mm long 12 mm dia galv. bolt, double nuts using double galv. washers. In case of copper plate, copper flat of not less than 25 mm x 6.0 mm shall be used as the earth lead. The flat shall first be fastened on one side of the plate, leaving adequate length of flat, which shall be taken over to the other side i.e. to the earth busbar, switchboard, pole, continuous earth wire for O.H. line, service bracket, lightning arrestor or the object to be earthed and be fastened as per the details of IS:3043-1987. No joint on the earth lead conductor is permitted. Every care shall be taken to ensure that the ends of the wire/ flats have been securely clamped by the bolt on cleaned surface of the plate and establish a good electrical contact.

The plate shall be buried vertically at a minimum of 3.6 M below the ground level for sandy soil and 2.0 m below the ground level for normal soil. In order to place the same at the prescribed depth, the dimension of pit to be excavated shall be 900 mm x 900 mm x 4 m deep. The G.I. plate shall be placed in position by the contractor only after the inspection of excavated pit and approval is obtained from the Consultant/ Employer.

After placing the plate the earth lead conductor shall be protected by means of a continuous length of G.I. pipe (Class B) having 50 mm dia (minimum) bore or route depending upon the size of the lead, right from the plate upto a height of 600 mm metre (2 ft.) above ground level. The whole length of pipe shall be filled with bituminous compound of approved make and brand. The molten compound shall be poured from the top end of the pipe and topped upto overflowing.

A masonry inspection pit for the earth station of inside dimension approximately 300 mm x 300 mm x 300 mm depth (unless otherwise stated) shall be built with 125 mm thick cement mortar (6:1) brick work with 1st class bricks, both inside and outside plastered with 20 mm thick and neatly cemented 1.5 mm thick, inside, top and outside around the top of the earth pit. The opening on top shall be provided with C.I. manhole ring having lockable C.I. cover fixed and flush with the outside finished ground level.

Electrodes shall be buried at least 2 metre away from masonry structure/ building/ pole or object to be earthed. However, earthing electrodes for L.C. installations should be as close to the down conductors as possible. Electrodes when installed in parallel, shall not be placed less than 2 metre apart and preferably placed at distance greater than 6 metres.

All the excavations shall be duly back filled, dressed and rammed.

24. EARTH BUSBAR

a. GALVANISED M.S. FLAT

Unless otherwise specified in the schedule of quantities, the earth busbars shall be of heavily galvanised M.S. Flat of cross section 50mm x 6mm having adequate number of drilled holes with 10mm galvanised steel bolts, nuts, plain and spring washers for securely connected the earth leads and the continuity of conductor. The busbar shall be fixed on wall, having clearance of 6mm from wall with spacing insulators with 13mm dia G.I. rag bolts, spaced about 50mm apart.

b. COPPER FLAT

To be used, as specified in the schedule of items, where earthing requirements are more stringent, with use of brass bolts, nuts, washers for connections

c. EARTH LEAD CONDUCTOR

The earth lead for each electrode shall be 7/10 S W G stranded G.I. wire connected securely to the earth electrode and earth busbar. The earth lead shall be mechanically protected with a continuous length of 25mm dia G.I. Pipe (Class 'B') right from the electrode to the earth busbar and the pipe shall be filled with bituminous compound.

Galvanised M.S. Flat earth conductor directly buried in ground shall generally be taken at a depth of 600 mm and shall be provided with one coat of bituminized paint, one layer of half lapped bituminized tape and a final coat of bituminized paint to prevent corrosion. The earth conductor when laid inside building/ sub-station shall be taken either exposed on cable racks/ trays, walls, ceiling, etc. or embedded in concrete depending on installation. Galvanised M.S. saddles clamped to M. S. flat spacers with tapped holes shall be used for clamping earth conductor. Flats shall be supported at intervals not exceeding 500 mm and stranded wires at intervals of 300mm. Connection of earthing leads to earth electrodes and termination of flat earth continuity conductor to equipment shall be made by means of bolting. Connection of stranded earth wire to earth bus as well as to equipment shall be made through crimping type lugs and bolting. Jointing and tapping of flat earth conductor shall be done by means of welding.

The earth resistance from any point of the earthing system shall not be more than one ohm.

25. WORKMANSHIP AND INSTALLATION WORK

The workmanship shall be of good commercial quality and all supply material and installation work shall be completed to the full satisfaction of the Consultant/ Engineer- in- Charge.

26. CONTRACTORS RATE TO INCLUDE

Apart from other factors mentioned elsewhere in this contract, the rates for the above shall include for the following:

- i. All labour, materials, tools and construction equipment required for fabricating and fixing of above stated items.
- ii. Scaffolding including erection and removal.
- iii. Making good of all damaged civil work, if any.
- iv. Necessary modification of pre-laid conduit including supply & fixing of Metal/ PVC conduits and accessories, chase cutting, etc. as required to complete the work.

APPENDIX -A**List of approved make of manufacturer for different material to be used in the project:**

S. No.	Name of Materials	Make of Material
1.	PVC Conduit and Accessories	M/s Polypack / AKG/ finolex
2.	PVC insulated Copper conductor wires 650/1100 Volts grade	M/s /finolex /polycab /Havel's/Anchor/KEI
3.	PVC insulated Aluminium conductor armoured cables`	M/s. Gloister/ CCI/Havel's
4.	Miniature Circuit Breakers	M/s Hager/ / LEGRAND/Schneider
5.	Switches, plugs, telephone outlets and electronic regulators	M/s LEGRAND(My link) , Anchor Roma, Crabtree
6.	Distribution Boards	M/s Hager/ LEGRAND/SSK
7.	MCCB's	M/s Hager / Siemens /LEGRAND/ Schneider
8.	Current / Voltage transformers	M/s Automatic Electric
9.	Meters	A.E/HPL
10.	Change over switch	L&T/HPL/ABB
11.	Lighting Fixture	Philips/Bajaj/Crompton
12.	Other makes approved in JKPCC Ltd	In addition to the above makes, other makes approved in JKPCC Ltd. (having satisfactory performance report from the concerned DGM) are also acceptable.
13.	Any other item	Sample to be approved by Engineer in charge.

QUALIFICATION FORMS

APPLICATION FORM - 1
General Information

PAGE ____ OF ____ PAGES

1.	Name of firm	
2.	Head office address	
3.	Telephone Fax Email	
4.	Contact Person(s) Name Title/Position	
5.	Place of incorporation / registration Date	
6.	Legal status of firm	
7.	Field of specialty in business	
8.	Number of persons	

Date _____

Signature _____

Name of the Applicant

General Work-Experience:

1. Annual Turnover

The information supplied should be the annual turnover of the Applicant (separately for each partner of a joint venture/ each member of a consortium), in terms of the amounts paid by the clients for each year in the last five (5) years. Unless specifically asked for, Applicants need not to enclose testimonials, certificates, and publicity material with their applications; they will not be taken into account in the evaluation of qualifications.

Fiscal Year	Turnover (unit)
1.	
2.	
3.	

Fiscal year begins on _____ in each calendar year.

2. Selection Criteria:

Experience as Contractor (relevant categories of works) completed in the last Five(5) years to demonstrate the Applicant's business experience should be listed in separate sheets in a form as shown below:

No.	Name of Project	Role of the Applicant (sole contractor, or partner in JV/Consortium)
1		
2		
3		

Date _____ Signature _____

NB : To please attach detailed data sheet wherever possible.

Current Contract Commitments/ Works in Progress

Name of Applicant

Applicants shall provide detail about current List of projects on which he is working

Name of contract	Description of works	Stipulated date of completion
1.		
2.		
3.		
4		
5		
6.		
7.		
8.		
9.		
10.		

Date _____

Signature

TENDER PROFORMA OF BID

Managing Director,
JKPCC Ltd.,
Jammu.

Sub:

Sir,

This has reference to above mentioned NIT and our offer against the same is as under:

1. I/We hereby affirm that I/We have read and have fully understood all terms, conditions and technical specifications of tender document.
2. I/We hereby offer to supply genuine goods and material at the rates and quantities as described in our subject offer and shall execute the work(s) truly and faithfully within the time specified and set forth in the aforesaid offer. The goods and material to be supplied will be of the quality answerable in every respect with our offer / tender quoted above.
3. I/We shall be responsible for all complaints as regard the quality of material and all material and equipment shall comply in all respects with the requirement of quoted standard specifications.
4. I/We do hereby certify that the material and equipment offered are free from legal encumbrances and any claim regarding infringement and any patent of country of origin or India and shall be defended by us at our own cost and damages/ cost, if forwarded against purchaser in such a suits shall be borne by us.
5. I/We shall be hereby responsible for all complaints as regards quality of the material/ bad workmanship and for all such complaints the decision of the Corporation will be final and binding on us.
6. I/we enclosed a DD No. :_____ dt:_____ for the prescribed amount of Rs:_____(Rs:_____)drawn in favour of " _____ "as Cost of Tender Document and CDR/FDR: _____ dt:_____ for the prescribed amount of Rs:_____ (Rs:_____) drawn in favour of " _____ "as earnest money and as required in terms of tender specification. I/we fully understand that in the event of my / our tender being accepted, the earnest money shall be returned back to me after successful completion of the work.
7. I/we shall have no claims to the refund of the earnest money prescribed against this tender in the event of my / our non-compliance of the work order, provided such order is placed within the period of validity of my / our tender as indicated in paragraph 10 below.
8. I/we further understand that my earnest money will stand forfeited even if I withdraw my tender at any stage during the currency of the period of validity.
9. My/our tender shall remain valid for a period of 90 days from the date of opening of the tender against the NIT No: 12 of 2019-20 dated:07/12/2019.
10. My/our tender along with the terms and conditions with relevant columns and annexure duly filled in under my / our attestation and with each page of the tender papers including the enclosed terms and conditions signed by me / us (in the capacity of sole owner / general or special / attorney, in proof of which power of attorney is attached) is submitted for your favorable consideration.
11. I/we have read the enclosed terms and conditions carefully and have signed the same in token of their absolute and unqualified acceptance. My/our tender constitute a "firm" offer under the J&K contract Act and is open to an acceptance, in whole or in part. My/our offer, if accepted on the attached terms and conditions will constitute a legal binding contract and shall operate as contract as defined in the J&K Contract Act and the Sales of Goods Act.
12. I/We understand that Managing Director, JKPCC Ltd., reserves the right to accept or reject the tender without giving any reason thereof.

Thanking you,

Yours faithfully

Signature

Name & Full address of tenderer with stamp

Place

Date.....

**Bid Security Forms
Bank Guarantee**

Date: _____

(Name of Contract)

To: (Name and address of Employer)

WHEREAS (name of Bidder) (hereinafter called "the Bidder") has submitted its Bid dated (date of bid) for the performance of the above-named Contract (hereinafter called "the Bid")

KNOW ALL PERSONS by these present that WE (name of Bank) of (address of bank) (hereinafter called "the Bank"), are bound unto (name of Employer)(hereinafter called "the Employer") for the sum of: (amount), for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents.

THE CONDITIONS of this obligation are as follows:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder in the Bid Form, or adopts corrupt and fraudulent practices.
2. If the Bidder, having been notified of the acceptance of its Bid by the Employer during the period of bid validity
 - a) Fails or refuses to sign the Contract Agreement when required, or
 - b) Fails or refuses to submit the performance security in accordance with the bidding documents or.
 - c) Adopts corrupt or fraudulent practices.

WE undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will mention that the amount claimed by it is due, owing to the occurrence of one or both of the two above-named CONDITIONS, and specifying the occurred condition or conditions.

This guarantee will remain in force up to and including (date 90 days after the period of bid validity), and any demand in respect thereof must reach the Bank not later than the above date.

For and on behalf of the Bank

in the capacity of Common Seal of the Bank

Check list before uploading Tender "Balance Internal Electrification work of Library Block of BGSB University at Rajouri."

Ref: E-NIT No: E-NIT No: 12 of 2019-20 Dt. 07.12.2019 / Estimated Cost: Rs 34.00 Lacs				
#	Essential Requirement	Reference to NIT	Uploaded (Yes/No)	Remarks, if any
1	Receipt of Cost of Document.	Page 1 of Main NIT (Instructions to bidders)		
2	Receipt of Earnest Money.	Page 1 of Main NIT (Instructions to bidders)		
3	Certificate of a valid ' A Class" electric contractors registered with JKPCC Ltd./J&K State Govt./CPWD/Railways and other State/Central Govt. undertaking	Page 1 of Main NIT (Instructions to bidders)		
4	Copy of valid PAN	Page 1 of Essential Condition		
5	Copy of original Valid GST Registration Certificate	Page 1 of Essential Condition		
6	Notarized Affidavit with all the undertakings	Page 1 of Essential Condition		
7	Proof of turnover of 50% of Advt. Amt. during any 3 years of preceding 5 years.	Page 1 of Essential Condition		
8	Certificate of successful completion of similar nature of work/s in preceding 5 years of value: i) One work of 80% of the estimated Cost -or- ii) Two works of 60% of the estimated Cost -or- iii) Three work of 40% of the estimated Cost.	Page 1 of Essential Condition		
Note:	Any shortcoming will make the bid non-responsive			