



STATE BANK OF INDIA
REGIONAL BUSINESS OFFICE, DHANGU ROAD PATHANKOT.
TENDER FOR THE ELECTRICAL WORKS OF SBI
AMRITSAR ROAD BATALA BRANCH (PUNJAB.)

E-TENDER DOCUMENT FOR
PROPOSED ELECTRICAL WORKS OF SBI AMRITSAR ROAD
BATALA BRANCH (PUNJAB.)
(ELECTRICAL WORKS)
TENDER NOTICE
THROUGH E-TENDER PROCESS

Electrical Contractors who are on the panel of SBI, Chandigarh Circle,
(LHO) in the Appropriate category are only eligible

TECHNICAL BID
Last date for submission of Tender: 16/07/25 by 1.00 PM

TENDER SUBMITTED BY :

NAME : _____

ADDRESS : _____

MAIL ADDRESS : _____

NAME & PHONE NO. _____

OF CONTACT PERSON : _____

**The Regional Manager,
State Bank of India,
REGIONAL BUSINESS OFFICE
Region - 5
PATHANKOT.**

NOTICE INVITING TENDER (NIT)

NAME OF WORK: SBI invites E-TENDER FOR PROPOSED ELECTRICAL WORKS FOR SBI AMRITSAR ROAD BATALA BRANCH (PUNJAB.)

1	Name of the work	E-TENDER Notice for PROPOSED ELECTRICAL WORKS FOR SBI AMRITSAR ROAD BATALA BRANCH (PUNJAB.)
2	Estimated Cost	Rs, 9,41,299/- (plus GST as applicable)
3	Quantum of Earnest Money Deposit (EMD)	The vendor shall submit Drafts/BCs of Rs.18850/- in favor of “State Bank of India Payable at Pathankot
4	Date and Time where tender forms are available	From 27/06/2025 till 16/07/25 upto 1:00 pm at https://etender.sbi
5	Last date and time of submission of online E-Tender and Offline Technical Bid and EMD	16/07/2025 Upto 01:00PM
6	Place, date & time for submission of tender Contact person /telephone no/ email address.	<p>On line submission of e-Tender (Including Technical Bid and Price Bid) up to 16/07/25 Up to 01:00PM at https://etender.sbi</p> <p>Offline Technical Bid and EMD submission Address: The Regional Manager, State Bank of India, REGIONAL BUSINESS OFFICE REGION-5, PATHANKOT 16/07/25 Upto 01:00PM Contact: Desk Officer: Mr.Manoj 98557-70160</p>
7	Date, Time and Place of opening of Tender	16/07/25 at 02:30PM The Regional Manager, State Bank of India, REGIONAL BUSINESS OFFICE REGION-5, Pathankot

8	Quantum of Security Deposit(percentage)	1. Initial Security Deposit(ISD) –2% of the Tender value including EMD 2. Retention Money- 5% of the running bills and Total deduction of 5%ofvalue of work including EMD,ISD.
9	Stipulated time for completion of the Work/supply.	120 Days from the date of the work order issued to the contractor
10	(Penalty clause) Liquidated Damages	@ 0.5% of the value of work per week of delay subject to a maximum penalty of 5% of the value of work would be strictly imposed.
11	Validity period of the tender.	Three(3) Months
12	Defect Liability Period	Twelve(12)Months
13	Eligible Taxes	A) Income Tax & GST IT will be deducted at source as per Govt. Guidelines. B) Reimbursement of GST will be made only on submission of proper GST invoice as per applicable GST provision. The contractor should comply with the following; 1. Contractor should have GST Registration Number 2. Invoice should specifically/separately disclose the amount of GST levied at applicable rate as per GST provision 3. IncaseofCorrectioninthebillsafterscrutiny,contractorshould submit fresh bills for payment 4. Contractor should timely file his GST return in accordance with GST provisions to enable the bank to claim the credit of GST paid to the contractor 5. The GST Number of State Bank of India are For Punjab State- 03AAACS8577K1ZZ
14	Electronic Payment	Payment shall be made by way of Electronic fund transfer and the bill will be paid by the Branch . Firm should furnish details of the bank,a/c no, IFSC code
15	Any additional Information	The quoted rate should be inclusive of materials, labour, wages, fixtures, transportation, installation, all taxes (excluding GST),wastages,Octroi,machinery,temporaryworkssuchasscaffolding, cleaning,overheads,profit,statutoryexpenses, incidental charges and all related expenses to complete the work
16	EVALUATION OFPRICEBIDSAN DFINALIZATION	1. Only those Bidders who qualify in Technical evaluation would be shortlisted and the E-price bid submitted by the bidder will be opened. 2. The L1 Bidder will be selected on the basis of net total of the price evaluation as quoted in the bidding. 3. In case, the L1 amount quoted by two or more contractors is the same, such lowest contractors will again be asked to submit sealed “Revised price bid” on the original Estimated Cost of tender but the revised price bid shall, in no case, be higher than the price quoted during their initial offer for the project. The L1 shall be decided on the basis of revised offers.

		<p>4. The process of rebidding amongst the two or more contractors offering same rates shall continue till L1 bidder is discovered. If required, SBI shall conduct reverse auction to discover the L1 bidder.</p> <p>5 In case, any of such contractors or all contractors (who have quoted same tender amount in the initial bidding or subsequent bidding) refuse to submit revised offer, it shall be treated as “Withdrawal of tender” by the Contractor before acceptance by SBI and the EMD of such contractors shall be forfeited and they shall not be allowed to participate in the re-tendering process for the work.</p> <p>6. If the final L1 bid is unreasonably low i.e. L1 bid is less by 10% or more of the Estimated Cost, the contractor shall submit Additional Security Deposit in the form of PBG/DD for an amount equal to difference in the 90.0 % of the estimated cost vis-a-vis final tender amount quoted by the L1 contractor. PBG/DD to be submitted within 7 days from issue of letter from Bank.</p> <p>7. If the L1 bidder refuses to give the PBG, then the EMD will be forfeited and the tender will be re-invited. The L1 bidder will not be allowed to participate in the retendering process.</p>
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1. **Scanned copy of EMD must be uploaded and the same needs to be submitted at given address within due date of tender.**
2. **Firm can visit the website till last date of submission for changes Corrigendum if any will be published only in <https://etender.sbi>**
3. **L-1 Tenderer signed copy of entire tender document should be submitted within 3 days from date of tender opening.**

REGIONAL MANAGER,
STATE BANK OF INDIA

INSTRUCTIONSTOTENDERERS

Tenders are invited for **SBI AMRITSAR ROAD BATALA BRANCH (PUNJAB.)**

1.
 2. Submission of BIDs/Tender Documents: Tenders should be submitted online in the website <https://etender.sbi>. In addition, scanned copy of the declaration given in the tender to be signed with seal and scanned proof of dealership/empanelment letter certificate should be submitted on-line with our service provider on the website at: <https://etender.sbi>.
 3. Contractors should submit/send Technical Bid and **EMD physically within due date of the tender** at the office address mentioned the in NIT document. The tender will be rejected if the tenderer fails to submit the EMD.
 4. Contract documents consist of detailed plans, technical specification, schedule of quantities of the various classes of work to be done, and these of 'conditions of contract' to be compiled with by the person whose tender may be accepted. The documents are available in the website <https://etender.sbi>.
 5. **Whole tender should be submitted online alongwith submission of Technical Bid and EMD Offline as well. (As mentioned in NIT).**
 6. **EMD amount (As mentioned in NIT)** is to be deposited in the form of Demand Draft/ Banker's Cheque payable pathankot and drawn in favor of State Bank of India, otherwise the tender is liable for rejection.
 7. The successful tenderer will have to pay an amount of Initial **Security Deposit**, which shall be 2% of the accepted value of the tender, by means of D.D. in favor of **State Bank of India, Pathankot** The Initial security deposit is to be paid by the Contractor to Bank within 7 days of intimation to him of the acceptance of the tender. No interest is allowed on the above said security deposit(EMD,ISD)
 8. Retention Money: From each running bill, an amount at the rate of 5% of the gross value of the running bill shall be recovered as retention money, till the total retention amount including the EMD and ISD amounts already with the Bank become 5% of the value of the contract amount.
This amount is called as Total Security Deposit, which consists of three components
 - a) EMD - Earnest Money Deposit.
 - b) ISD –Initial Security Deposits.
 - c) RM-Retention Money.

The total security deposit will be kept with the Bank. And total security deposit may be refunded after the end of defects liability period (**one year**), provided he has satisfactorily carried out all the works and attended to rectification of all defects in accordance with the conditions of the contract. In case of failure on the part to do so, the cost of rectifying the defects through any other agency shall be deducted from the amount of security deposit due to the contractor.

9. Completion of work:

- i) The work shall be considered as complete only when the certificate of virtual completion is issued by the architects/Bank.
- ii) The defects liability period as prescribed in the contract shall commence only from date of such virtual completion.
- iii) Any defect that may appear within the defects liability period shall be rectified by the contractor within reasonable time on receipt of necessary instructions from Bank to that effect.

10. The acceptance of a tender will rest with the Competent Authority, who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all the tenders received, without assigning any reasons. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.

11. All compensation or other sums of money payable by the Contractor to Clients under the terms of this contract may be deducted from the security deposit, or from any sum that may be or may become due to the Contractor on any account whatsoever and in the event of the Security Deposit being reduced by reasons of any such deductions, the Contractor shall within 7 days of being asked to do make good in by DD any sum which have been deducted from his security deposit.

12. Tender containing any condition leading to unknown / indefinite liability, are liable to be summarily rejected.

13. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

14. The tenderer should quote their(own) rates for undertaking the work.

15. GST as applicable will be reimbursed by Bank as specified in NIT.

16. All taxes other than GST, other statutory obligation in respect of this contract, as applicable, shall be payable by contractor including transportation and TA / DA of the workers at site and the Bank will not entertain any claim whatsoever in this respect

17. I.T. will be recovered as per Government Rules

18. Time is the essence of the contract. The work should be completed on time as mentioned in the NIT. The successful Contractor will have to give CPM/PERT chart of various activities of works to be done so that the work gets completed within the stipulated time. The chart shall be submitted within 7 days from the date of acceptance of the tender.

19. Tenders for works shall remain open for acceptance for a period of 90 days from the last date of tenders. If the tenderer withdraws his tender before the expiry of the said period or makes any modifications in terms and condition of the tender which are not acceptable to the Bank, then the bank without prejudice to any other right or remedy is at liberty to forfeit the earnest money.

20. The successful tenderer, after the work is awarded, he will have to enter into an agreement with the competent authority of the bank.

21. The tenderer must co-ordinate with the other agencies such as Interior/Furnishing/Electrical/IT/Fire/AC etc.
22. The tenderer should visit the site to ascertain the working conditions and local authority regulations/ restrictions if any and other information required for the proper execution of the work.
23. The work may be carried out on any floor level as per site condition. Please note that materials and machines are required to be carried on head load and the same must be accounted in the costing. Please note that no separate cost shall be allowed for head load.
24. The quantities of various items given in the schedule of quantities are approximate. The quantities of work may vary at time of allotment / execution of work. Bank reserves the right to omit /delete any item(s) of work from the schedule at the time of allotment / before. Contractor will be paid for the actual work done at the site duly verified by the concerned official of the bank.
25. The unit prices shall be deemed to be fixed price. In case of extra items, a record of labour charges paid shall be maintained and shall be presented regularly to the Employer's for checking. The settlement will be made based on figures arrived at jointly and taking unit price given in the contract assigned to the successful Tenderer. In case of extra items where similar or com-parable items are quoted in the tender, extra rates shall be based on tender rates.
26. If the rate quoted by the contractor for any item / items are not workable or abnormally lower than the market rate, the bank may demand Bank guarantee from the contractor for satisfactory completion of these work. The bank guarantee amount will be not less than 50% of the estimated amount of the items for which the rates are not workable or abnormally low. This bank guarantee will be released after completion of these works (unworkable and abnormally low rated items) to the satisfaction of the bank.
27. The contractor shall submit the bar chart/ CPM/ PERT as well as shall submit the insurance cover for the work in the form of CAR policy and Third-Party Insurance within seven (7) days from the acceptance of work order.
28. The work must be started within immediately from the date of receipt of work order/ mark out at site; whichever is later. In case of work not being started within this stipulated period, the bank reserves the right to cancel the work order duly forfeiting the Earnest money deposit
29. No employee of the Bank is allowed to work as a contractor for a period of 2 years of his/her retirement from Bank Services without previous permission of the Bank. This contract is liable to be cancelled, if either the contractor or any of his employees is any time to be such a person who had not obtained the permission of Bank as aforesaid before submission of the tender or engagement in the contractor's service.
30. Contractor should get approval of the samples of materials in advance with Bank's Engineer be-fore use of the same in the work'
31. Bank has the right to offer the contractor to modify the old material wherever/ whenever necessary instead of new supplies

32. The quoted rate should be inclusive of materials, labour, wages, fixtures, transportation, installation, all taxes(excluding GST), wastages, Octroi, machinery, temporary works such as scaffolding, cleaning, overheads, profit, statutory expenses, incidental charges and all related expenses to complete the work
33. The tenders shall summarily have rejected, if any one of the above said requirements has not be encompied with.
34. The Bank will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever
35. The contractor should fulfill the labour regulation guidelines stipulated bythe governments
36. No advance payment in any form will be granted for the works proposed
37. Period of taking up the final bill will be one month from/after satisfactory virtual completion or the date of submission of the final bill whichever is later.
38. Contractor is advised **not to engage child labour during the contract period**
39. The SBI reserves the right to cancel or postpone the tenders at any stage without assigning any reason.
40. Firm should visit the website till last date of submission for changes/corrigendum if any
41. Tender documents found partly or fully modified / altered/ corrected etc. shall stand summarily rejected
42. The make of materials should be chosen strictly from the approved makes as given in the tender Using of the multi brands is not permissible. Single brand should be used for entire project.
43. ANY CLARIFICATION SOUGHT AFTER OPENING OF THE TENDERS WILL NOT BE ENTERTAINED AT ANY COST.

REGIONAL MANAGER,
STATE BANK OF INDIA

FORM OF SUBMISSION OF TENDER
(To be filled by the tenderer)

To,
The REGIONAL Manager,
State Bank of India,
Regional Business Office-5
Pathankot.

Dear Sir/s,

REF:PROPOSED E-TENDER FOR ELECTRICAL WORKS FOR SBI AMRITSAR ROAD
BATALA BRANCH

I/We hereby declare that I/ We have carefully gone through the conditions laid down in the Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates, Form of Agreement, General Specification, Approved manufacturers/natural source of materials Technical Specifications of schedule of quantities, and clearly understood all the same and on the basis of the same I/ We have quoted our rates in the Schedule of Quantities(i.e. BOQ)attached with the tender documents.

I / We do here by undertaken to execute and complete the whole or part of the work (as desired by you) at the respective rates quoted.

I/ We are depositing Earnest Money Deposit (Amounts as per NIT) by way of demand draft drawn in favor of SBI, PATHANKOT; along with this tender for due execution of the work at my/our tendered rates.

In the event of this Tender being accepted I/ We agree to enter into the agreement and submit the declaration on requisite non-judicial stamp papers as and when required and execute the contract according to your form of Agreement etc., in default whereof, I/ We do hereby bind my-self / ourselves to forfeit the aforesaid deposit.

In the event of this Tender being accepted I/ We agree to obtain the labor license and the CAR and Third party insurance policy and deposit the balance E.M.D. amount and adhere/comply to all other instructions as given in TENDER DOCUMENT.

I / We further agree to complete the work included in the said schedule of quantities as mentioned in NIT from the date of the work order issued to commence the same.

Date of commencement shall be either one week from the date of work order issued to the contractor or the date on which mark out of work at site has been given to contractor; which ever is later.

I/We agree not to employ sub-contractors other than those that may be approved by Employer.

I / We agree to pay all taxes(except GST), insurance charges as prevailing from time to time, on such items for whom same is to be levied by/ for the government, and the rates quoted by me / us are inclusive of all the same.

Yours Faithfully,
Contractor's Signature _____
Name: _____
Address: _____

1.

Signature of Witness:

2.
3.

GENERAL NOTES

1. PROCEDURE OF FILLING AND SUBMISSION OF TENDER

- a) In the event of the tender being submitted by a firm, it must be signed by a member or members of the firm having legal authority to do so, and if called for, the legal documents in support thereof must be produced for inspection and the same in the case of the firm carried out by one member of a joint family. It must disclose that the firm is duly registered under the India Partnership Act. Any tender signed by a member not holding a power of attorney shall be treated as invalid.
- b) Tenderer shall note that their tenders shall remain open for acceptance for a minimum period of three months from the last date of receipt of tenders. The tenders must be unconditional. Conditional tenders may be summarily rejected.

2. RATE TO INCLUDE:

While quoting their rates the tenderer should include the following if otherwise not stated herein before.

- a) Necessary cost of taking samples of materials supplied by them for the work, testing of the same at Govt.'s/approved laboratory including transportation, cost of the samples, as and when required.
- b) Submission of test reports of other materials as may be specified by Bank's Engineer.

3. STORAGE OF MATERIALS:

The contractor shall not store their materials and debris within the premises other than the work site handed over to him.

5. LABOUR HUTMENT:

Shelter or stay and other amenities for the labors have to be arranged by the contractor at his own expense and responsibility (outside the Bank premises).

6. IDLE LABOUR:

In case the work is held up for any site conditions not attributable to the contractors or for any decisions instructions / want of details from Employer or for any of the conditions, the contractor shall be allowed reasonable extension of time by the employer but any claim for idle labour shall not be entertained by the employer. Contractor's quoted rates should include for all such contingencies.

7. The contractor shall engage one competent person at site who shall take the instructions from the Employer. The work should not suffer due to lack of supervision, manpower and materials.

8. The Contractor is required to co-ordinate his works along with other agencies working at site. He has to reimburse any of the damage made by him or any of his representatives for any of the other agency or owner at site.

9. Making of any cut-out / opening for electrical wiring / fitting in any of false ceiling, partition, Paneling, masonry work etc., and providing panels of the same finish in partitions, paneling shall not be paid extra.

10. The contractor is required to fabricate a sample where required, or any item so installed for approval. Any changes made by the Architect/Employer, in the sample to the specifications as mentioned in the tender, shall not be deducted or paid extra.

11. All measurements given in the schedule hereunder are for the purpose of tender only. Payment will be made on actual measurement of the work done

12. All measurements shall be as per relevant I.S. standards

GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down hereinafter and, in the drawings, the work shall be carried out as per standard specifications and under the direction of Employer.

1. INTERPRETATION

In constructing these conditions, the specifications, the schedule of quantities, tender and agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires.

- a) **Employer:** The term employer shall denote **SBI (State Bank of India having RBO AT PATHANKOT)** and any of its employees representative authorized on their behalf.
- b) **Architects / Consultants:** The term Architects shall mean the Architects appointed by the employer for the purpose of preparing detailed drawing, supervision etc. It is the Bank to decide whether to appoint Architect or not and to change the Architect at any stage of work.
- c) **Contractor:** The term contractor shall mean _____ (Name and address of the contractor) and his /their heirs, legal representatives, assigns & successors.
- d) **Site:** The site shall mean the site where the works are to be executed, i.e. interior works, at SBI Branch including any building and erection thereon, allotted by the employer for the contractors use.
- e) **Site Engineer:** Any Engineer appointed from time to time by the Employer and certified in writing to the Architects and the Contractor, to be positioned at site to supervise the work.
- f) **Drawings:** The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings which may be supplied or any other instruction, which maybe given by the Employer or Architects during the execution of the work.

All drawings relating to work given to the contractor together with a copy of schedule of quantities are to be kept at site and the Employer / Architects shall be given access to such drawings or schedule of quantities wherever necessary.

In case any detailed Drawings are necessary contractor shall prepare such detailed drawings and / or dimensional sketches therefore and have it confirmed by the Employer as case may be prior to taking up such work.

The contractor shall ask in writing for all clarifications on matters occurring anywhere in drawings, specifications and schedule of quantities or to additional instructions at least 10 days ahead from the time when it is required for implementation so that the Employer may be able to give decision there-on.

- **“The Works”** shall mean the work or works to be executed or done under this contract.
- **“Act of Insolvency”** shall mean any act as such as defined by the Presidency MAINS Insolvency Act or in Provincial Insolvency act or any amending status.
- **“The Schedule of Quantities”** shall mean the schedule of quantities as specified and forming part of this contract.
- **“Priced Schedule of Quantities”** shall mean the schedule of quantities duly priced with the accepted quoted rates of the contractor.
- **“Contract”** shall mean the Articles of Agreement, the general conditions special conditions, the appendix, the schedule of quantities, specifications and drawings attached

hereto and duly signed.

- 'Contract Price' shall mean the sum named in the Tender subject to such additions thereto or deductions there from as maybe made under the provisions hereafter contained.
- 'Notice in Writing' or written notice shall mean a notice in writing, type or printed characters sent(unless delivered personally or otherwise provided to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered.
- 'Net Prices' any arriving at the Contract amount the Contractor shall have added to or deducted from the total of the items if the Tender any sum, either as a percentage or otherwise, then the net price of any item in the tender shall be the sum arrived at by adding to or deducting from the ac-tual figure appearing in the tender as the price of that item a similar percentage or proportionate sum. Providing always that in determining the percentage or proportion of the sum so added or deducted by the contractor, the total amount of any Prime Cost items and provisional sums of money shall be deducted from the total amount of the Tender. The expression 'net rates' or 'net prices' when used with reference to the contract or account shall be hold to mean rates or prices so arrived at.
- 'Virtual Completion 'shall meant he premise is in the opinion of the Employer fit for occupation.
- Words importing persons include firms and corporations. Words importing the singular only, also include the plural and vice verse where the Context requires.

2. SCOPE OF WORK/CONTRACT

The Brief Scope of work involves the following.

1. ELECTRICAL WORKS

The Contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of the Employer. The Architect with approval of Employer or Employer issue further drawings and/or written instructions, detailed directions and explanations which here after collective referred to as 'Instructions' in regard to:

- Thevariationormodificationofthedesignqualityorquantityofworksortheadditionoromissio nor substitution of any work.
- Anydiscrepancyinthedrawingsorbetweenthescheduleofquantitiesand/ordrawingsand /or specification.
- Theremovalfromthesiteofanydefectivematerialbroughtthereonbythecontractorandthes ubstitution of any other material thereof.
- The demolition removal and / or re-execution of any work executed by the contractor/s.
- The dismissal from the work of any persons employed there upon.
- The opening up for inspection of any work covered up.
- The rectification and making good of any defects under clauses here in after mentioned and those arising during the maintenance period (Defect Liability Period).

The contractor shall forthwith comply with and duly execute any work comprised in such Employer's or his agent / Architect's instructions, provided always that verbal instructions, directions and explanations given to the contractor's or his representative upon the works by the Employer's or his agent / Architects shall, if involving a variation, be confirmed in writing to the contractor/s within seven days. No works, for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer. The employer as provided in clause "variation" shall fix rates of items not mentioned in the priced schedule of quantities.

Regarding all factory-made products for which ISI marked products are available, only products bearing ISI marking shall be used in the work.

3. TENDERER SHALL VISIT THE SITE

Intending tenderer shall visit the site and make himself thoroughly acquainted with the local site condition, nature and requirements of the works, facilities of transport conditions, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport etc., for proper execution of work as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition. Work to be done in phase manner.

4. TENDERS

The Employer reserves the right to reject the lowest or an tender.

The tenderers should note that the tender is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self-supporting. If called upon by the Employer/Architects detailed analysis of any or all the rates shall be submitted. The Employer/Architects shall not be bound to recognize the contractor's analysis.

The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract, unless otherwise specified.

All items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump-sum charges in the tender in respect of any items of work will be made for the actual work done on the basis of lump sum charges as will be assessed to be payable by The Employer/ Architects.

The employer has power to add, omit from any work as shown in drawings or described in specifications or include in schedule of quantities and intimate the same in writing but no addition, omission or variation shall be made by the contractor without authorization from the Employer. No variation shall vitiate the contract.

The tenderer shall note that his tender shall remain open for consideration for a period of three months from the date of opening of the tender.

5. AGREEMENT

The successful contractor will be required to sign agreement in accordance with the draft agreement enclosed and the schedule conditions. The contractor shall pay for all stamps and legal expenses, incidental thereto. However the written acceptance by the employer of a tender will constitute a binding contract between the employer and the person so tendering such formal agreement is subsequently executed.

6. AUTHORITIES, NOTICES, PATENT RIGHTS AND ROYALTIES:

The contractor shall conform to the provisions of any Acts of the Legislature relating to the work, and to the Regulations and Bye-Laws of any authorities, and / or any water, lighting and other companies, and / or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specifications that may be associated to so conform, give the Employer / Architects written notices specifying the variations proposed to be made and reasons for making them and apply for instruction thereon. The Employer / Architects on receipt of such intimation shall give a decision within a reasonable time.

The contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer. The Contractor shall identify the Employer against all claims in respect of patent rights, designs, trade-marks or name or the protected rights in respect of any constructional plant, machine, work or material used for or in connection with the works or temporary works and from and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the Employer/ Architects, before any such infringement and received their permission to proceed and shall himself

pay all royalties, license fees, damages, cost and charges of all and every sort that may be legally incurred in respect thereof.

7. TAXES AND DUTIES

The tenderers must include in their tender prices quoted for all taxes (except GST) and duties royalties, cess, local charges if applicable. No extra claim on this account will in any case be entertained.

8. NOTICES AND STATUTORY REGULATIONS:

The contractor shall give all notices and pay all fees and shall comply with all Acts and Regulations for the successful completion of the contract works.

The whole of the work is to be complied with as per the requirements and bylaws of the relevant statutory authorities including contract labor (Regulation and Abolition) Act 1970.

9. QUANTITY OF WORK TO BE EXECUTED

The Schedule of Quantities unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Procedure shall be considered to be approximate and no liability shall attach to the employer for any error may be discovered therein. The Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefore.

The Contractor shall be deemed to have satisfied himself before tendering to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities and / or the Schedule of Rates and Prices, which rates and prices shall cover all things necessary for the completion of the works.

10. OTHER PERSONS ENGAGED BY THE EMPLOYER

The Employer reserves the right to execute any part of the work included in this contract or any work, which is not included in this contract by the other Agency, or persons and contractor shall allow all reasonable facilities and use of his scaffoldings for the execution of such work. The main contractor shall extend all cooperation in his regard.

11. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The Contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provide that the same can reasonably be inferred there from and if the contractor finds any discrepancies therein he shall immediately and in writing, refer the same to the Employer / Architects whose decision shall be final and binding.

12. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART

The Contractor shall be allowed admittance to the site on the 'Date of Commencement' stated in the Appendix, and he shall thereupon and forthwith begin the works and shall regularly proceed with to complete the same. On or before the 'Day of Completion' stated in the Appendix subject nevertheless the provision for the extension of time hereinafter contained.

If in the opinion of the Employer/Architect the works be delayed:

- a) By force major or
- b) By reason of any exceptionally inclement weather or
- c) By reason of proceeding taken or threatened by or disputewith adjoining or neighboring owners or public authorities arising, than through the Contractor's own default or
- d) By the works or delays of the contractor's tradesmen engaged or nominated by the Employer/Architect and not referred in the Schedule of Quantities and /or specifications or
- e) By reason of Furnishing, commotion, local combination of workmen or strike or lock-out effecting any of the buildings traders or
- f) In consequence of the Contractor not having in due time, necessary instructions from the Employer for which he shall have specifically applied in writing ahead of time, giving reasonable time to pre-prepare such instructions, the employer shall make a fair and reasonable extension of time for completion of the Contract works

In case of such strike or lock-out, the Contractor shall as soon as possible give written notice thereof to the employer, but the Contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all they may reasonably be required, to the satisfaction of the employer to proceed with the work.

The Contractor on starting the works shall furnish to the Employer / Architect a PERT / CPM Program for carrying out the work stage in the stipulated time for the approval of Architect / Employer and follow strictly the approved time schedule incorporating charges if any, to ensure the completion of the work in stipulated time. A graph or chart on individual work shall be maintained showing the proportionate progress of work week by week a weekly progress report stating the number of skilled and unskilled laborers employed on the work, working hours done, place, type, and quantity of work done during the period.

The Contractor must inform the employer within 10 days in advance of all drawings and detailed required by him from time to time. The Contractor shall adhere to the approved program and arrange for The materials and labour etc. accordingly.

Despite repeated instructions, if the Contractor fails to show proportionate progress of the work, the Architect / Employer may take suitable action and deemed fit without prejudice to any terms and conditions of the contract

13. LIQUIDATED DAMAGES

Should the work be not completed to the satisfaction of the Employer /Architects within the stipulated period, the contractor shall be bound to pay to the Employer as sum calculated as given below by way of liquidated damages and not as penalty during which the work remains un-commenced or unfinished after the expiry of the completion date.

If the contractor fails to complete the work by the Scheduled date of completion or within any sanctioned extended time, he will have to pay liquidated damages at 0.5% of contract amount for each week beyond the date that the work remains incomplete subject to maximum of 5% of the contract value

14. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS.

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most work man like

manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars and instructions as may from time to time be given by the Employer /Architects during the execution of the work and to his entire satisfaction.

All mandatory tests shall be carried out as per CPWD specifications. If required by the Employer /Architects, the contractor shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the Employer / Architects at his own cost to prove that the materials etc., under test conform to the relevant I.S Standards or as specified in the specifications. The necessary charges, transporting, testing etc., shall have to be borne by the contractor. No extra payment on this account should in any case been etertained.

All the materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charges for import duties, and other charges and must be the best of their kind available and the con-tractors must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workmanlike manner. **Samples of all materials to be used must be submitted to the Employer when so directed by the Engineer and written approval from Employer must be obtain prior to placement of order.**

Any damage (during the work) to any part of the work or to the premises for any reasons due to rain, storm or neglect of contractor shall be rectified by the contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lock-outs or any other cause, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from anyof these causes.

The contractor shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the work whether by himself or special tradesmen or sub-contractor and any damage caused must be made good by the contractor at his own expenses.

Contractor should take all precaution to safeguard the flooring and if any damages to the flooring should be rectified by the contractor in the same quality at his own cost.

15. REMOVAL OF IMPROPER WORK

The Employer shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer / Architects are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions. In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay otheragenciestocarryouttheworkandallexpensesconsequentthereonorincidentaltheretoascertified by the Employer / Architects shall be borne by the contractor or may be deducted from any money due to or that may become due to the contractor. No certificate, shall relieve the contractor from his liability in respect of unsound work or bad materials.

16. SITEENGINEER

The Employer may appoint a Site Engineer or clerk of works who shall be representative of the Employer. The duties of the Employer representative are to watch and supervise the works and to test any materials to be used of workmanship employed in connection with the works. He shall have no authority either to relieve the Contractor of any of his duties or obligations under the Contract, or except those expressly provided hereunder, to order any work involving delay or any extra payment by the Employer or any variation of or in the works.

The contractor shall afford the Employer's representative every facility and assistance for examining he works and materials and checking the measuring time and materials. Neither the Employer's representative nor any assistant to the Architect shall have power to revoke, alter enlarge or relax the requirements of this Contract, or to Sanction any day-work, additions, alterations, deviations or omissions unless such an authority maybe specially conferred by a written order of the Employer.

The Employer's Representative shall have to give notice to the Contractor or his foremen about the
Signatureofthe Contractor

non-approval of any work or materials and such works shall be suspended or the use of such material should be discontinued until the decision of the employer/Architect is obtained, the work will from time to time be examined by the Architect or the Employer's representative but such examinations shall not in any way exonerate the Contractor from the obligation to remedy defects which may be found to exist at any stage of the work after the same is completed. Subject to the limitations of this clause, the Contractor shall take instruction from the Architect /Employer.

17. CONTRACTOR'S EMPLOYEES

The Contractor shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the working hours to receive and comply with instructions of the Employer / Architects. The contractor shall engage at least one experienced Engineer as site-in-charge for execution of the work. The contractor shall employ in connection with the work person having the appropriate skill or ability to perform their job efficiently.

The contractor shall not employ labour below the age of sixteen years and who is not an Indian National.

Any laborer supplied by the contractor to be engaged on the work on day work basis either wholly or partly under the direct order or control of the Employer or his representative shall be deemed to be a person employed by the contractor.

LOCAL LAWS, ACTS, REGULATIONS

The contractor should abide by the central labour regulation and also shall strictly adhere to all prevailing labour laws inclusive of contract labour (Regulation and abolition act of 1970) and other safety regulations. The agency shall comply with the provision of all labour legislation including the latest requirements of all the acts, laws, any other regulations that are applicable to the execution of the tests.

- Minimum wages act, 1948 (Amended)
- Payment of wages act, 1936 (Amended)
- Workmen's compensation act 1923 (Amended)
- Contract labour Regulation and Abolition act 1970 and Central rules 1971 (Amended)
- REGIONAL Labour Commissioner (C), Ministry of Labour & Employment vide Gazette notification No. F.No. 1/13(3)/2017-LS-II dated 20th April 2017 on minimum wages
- Apprentice act 1961 (Amended)
- Industrial employment (Standing order) Act 1946 (Amended)
- Personal injuries (compensation insurance) Act 1963 and other modifications
- Employees' Provident Fund and Miscellaneous Provisions Act 1952 and amendment thereof
- Shop and Establishment Act
- Employer's Liability Act.
- Any other Act enactment there of and rules framed there under from time to time.

The contractor shall keep the Employer saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Employer in connection with any claim that may be made by any workmen.

The contractor shall comply at his own cost with the order for requirement of any Health Officer of the State or any local authority or of the Employer regarding the maintenance of proper environmental sanitation of the ADMINISTRATIVE where the contractor's laborers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The contractor shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind on the works or the lands adjoining the same. The contractor shall arrange to provide first aid treatment to the laborers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works report such accident to the Employer and also to the competent Authority where such report is required by law.

18. DISMISSAL OF WORKMEN

The contractor shall on the request of the Employer immediately dismiss from works any person employed thereon by him, who in the opinion of the Employer be unsuitable or incompetent or who may misconduct him. Such discharges shall not be the basis of any claim for compensation or damages against the Employer or any of their officer or employee.

19. ASSIGNMENT

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Employer and no subletting shall relieve the contractor from the full and entire responsibility of the contract or from active superintendance of the work during their progress

20. INSURANCE & DAMAGE TO PERSONS AND PROPERTY ETC.

The contractors under the terms of the contract are required to keep the works duly insured under CAR Policy (Contractor All Risk Policy) as well as third Party Insurance for the value of 110% of the Project value or Tender value until the Completion of the project or handing over whichever is later. The insurance policies should be taken in the joint names by the contractors and the same should be renewed at appropriate time.

The contractor shall be responsible for all injury to the work or 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 himself or of any sub-contractor or of any of his or a sub-contractor's employees, 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 clause shall be held to include inter-alia, any damage to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, foot paths or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind or other inclemency of the weather. The contractor shall indemnify the Employer and hold harmless in respect of all and any expenses arising from any such injury or damage to the person or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts on compensation or damage consequent upon such claim.

The contractor shall reinstate all damages of every sort mentioned in this clause so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property of third parties.

The contractor shall effect the insurance necessary and indemnify the Employer entirely from all responsibility in this respect must be effected jointly in the name of the Employer and contractor and the policy lodged with the Employer. The scope of insurance is to include damage or loss to the contract itself till this is made over in a complete state. Insurance is compulsory and must be effected from the very initial stage. The contractor shall 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.

The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums due to or to become due to the contractor.

21. MEASUREMENTS

Before taking any measurement of any work the Site Engineer or employer's representative shall give reasonable notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to countersign or to record the difference within a week from the date of measurement in the manner required by Site Engineer or by the subordinate deputed by him as the case maybe is final and binding on the contractor and contractor shall have no right to dispute the same.

The Employer / Architect shall issue a certificate after due scrutiny of the contractor's bill stating the amount due to the contractor from the Employer and the contractor shall be entitled to payment thereof, within the period of honoring certificates named in these documents.

22. PAYMENTS

All bills shall be prepared by the contractor in the form prescribed by the Employer's / Architects. Normally one interim bill shall be prepared each month subject to minimum value as stated in these documents.

The bills in proper forms must be duly accompanied by detailed measurements in M-book in support of

the qualities of work done and must show deductions for all previous payments, retention money, etc. The Architect shall issue a certificate after due scrutiny of the contractor's bill stating the amount due to the contractor from the Employer and the contractor shall be entitled to payment there of, within the period of honoring certificates named in these documents.

The Employer will deduct IT, other applicable taxes if any (but GST is reimbursable) and retention money as described in this document. The refund of retention money will be made as specified.

If the Employer has supplied any materials or goods to the contractor, the cost of any such materials or goods will be progressively deducted from the amount due to the contractor in accordance with the quantities consumed in the work.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in many respects or the accruing of any claim, nor shall it conclude, determine or affect in anyway the power of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one week of the date fixed for completion of the work or of the date of certificate of completion and payment shall be made within one month from the date of receipt of the bill.

Final Payment

The final bill shall be accompanied by a certificate of completion from the Architects. Payments on final bill shall be made after deduction of Retention Money as specified, which shall be refunded after the completion of the Defects Liability Period after receiving the Branch Manager/Engineer's certificate that the contractor has rectified all defects to the satisfaction of the Employer. The acceptance of the payment of the final bill by the contractor would indicate that he has no further claim in respect of the work executed.

23. VARIATION/DEVIATION

The tender rates shall be fixed and applicable for any increase or decrease in the tendered quantities. The Employer / Architect can increase or decrease any quantities to any extent or even delete particular item as per the site requirements and the contractor shall not be paid anything extra on this account. Nothing extra will be paid by the Bank on account of omission / deletion of items or decrease in the quantity of items. The Bank shall not entertain any claim whatsoever from the contractor on this account.

The price of all additional items/non-tendered items will be worked out on the basis of rates quoted for similar items in the contract wherever existing. If similar items are not available, the rates for such items will be derived as per standard method of rate analysis based on prevalent fair price of labour, material and other components as required with 15% towards contractor's profit and over-heads.

24. SUBSTITUTION

Should the contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Employer/ Architects in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equal" or "Other approved" etc. specific approval of the Employer/Architect has to be obtained in writing.

25. CLEARING SITE ON COMPLETION

On completion of the works the contractor shall clear away and remove from the site all machinery, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workmanlike condition to the satisfaction of the Employer/Architects.

26. DEFECTS AFTER COMPLETION

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, which may appear within 12 months after completion of the work. In the default, the Employer may employ and pay other 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 and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted by the employer, in lieu of such amending and making good by the contractor, deduct from any money

due to the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient to recover that balance from the contractor from the amount retained (retention money) together with any expenses the Employer may have incurred in connection therewith.

27. CONCEALED WORK

The contractor shall give due notice to the Employer/Architects whenever any work is to be covered up or finished up or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such covering, in default whereof the same shall, at the opinion of the Employer/ Architect be either opened up for measurement at the contractor's expenses or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked, the notes of the Employer / Architects shall be accepted as correct and binding on the contractor.

28. IDLE LABOUR

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

29. SUSPENSION OF WORKS

If the contractor except on account of any legal restraint upon the Employer preventing the continuance of the work or in the opinion of the Employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Employer shall have the power to give notice in writing to the contractor requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given, the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the contractor fails to start the work within seven days after such notice has been given to proceed with the works as therein prescribed, the employer may proceed as provided in clause 31 (Termination of Contract by Employer)

30. TERMINATION OF CONTRACT BY EMPLOYER

If the contractor being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated insolvent or shall make an assignment or a composition for the benefit of the greater part, in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the Official Assignee in insolvency, or the Receiver of the contractor in insolvency, shall repudiate the contract, or if a receiver of the contractor's firm appointed by the court shall be unable within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the employer that he is able to carry out and fulfill the contract, and if so required by the employer to give reasonable security therefore, or if the contractor shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the contractor, or shall assign, charge or encumber this contract or any payments due or which may become due to contractor, there under, or shall neglect or fail to observe and perform all or any of the acts matters of things by this contract, to be observed and performed by the contractor within three clear days after the notice shall have been given to the contractor in manner hereinafter mentioned requiring the contractor to observe or perform the same or shall use improper materials of workmanship in carrying on the works, or shall in the opinion of the employer not exercise such due diligence and make such progress as would enable the work to be completed within due time agreed upon, and shall fail to proceed to the satisfaction of the employer after three clear days notice requiring the contractor so to do shall have been given to the contractor as hereinafter mentioned or shall abandon the contract, then and in any of the said cases, the Bank may notwithstanding previous waiver determine the contract by a notice in writing to the effect as hereinafter mentioned, but without thereby effecting the powers of the employer of the obligations and liabilities of the contractor the whole of which shall continue in force as fully as if the contract, had not been so determine and as if the works subsequently executed by or on behalf of the contractor (without thereby creating any trust in favor of the contractor) further the employer or his agent, or servants, may enter upon and take possession of the work and all plants tools scaffolding sheds machinery, steam, and other power, utensils and materials lying upon premises or the adjoining lands

or roads and sell the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other contractors or other persons or person to complete the works, and the contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other contractors or other persons or person employed from completing and finishing or using the materials and plants for the works when the works shall be completed, or as soon thereafter as conveniently may be the employer shall give notice in writing to the contractor to remove his surplus materials and plants and should the contractor to remove his surplus materials after receipt by him the employer may sell the same by Public Auction and shall give credit to the contractor for the amount so realized. Any expenses or losses incurred by the contractor for the amount so realized. Any expenses or losses incurred by the employer in getting the amount payable to the contractor by way of selling his tools and plants or due on account of work carried out by the contractor prior to engaging other contractors or against the Security Deposit.

31. ARBITRATION

All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof this contract or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination foreclosure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Employer hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as herein after provided.

For the purpose of appointing the sole Arbitrator referred to above, the Employer will send within thirty days of receipt of the notice, to the contractor a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed from the following categories of Arbitrators”:-

- a) Retired High Court/Supreme Court judge who have experienced in handling Arbitration Cases.
- b) Member of Council of Arbitrators
- c) Fellow of the Institution of Engineers
- d) Eminent Retired REGIONAL Engineer from State/Central PWD/Public sector undertaking of good reputation and integrity
- e) Fellow of Indian Institute of Architects

The contractor shall on receipt of the names as aforesaid, select any one of the person's name to be appointed as a sole Arbitrator and communicate his name to the Employer within thirty days of receipt of the names. The Employer shall thereupon without any delay appoint the said person as the Sole Arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the Competent Authority shall make the selection and appoint the selected person as the Sole Arbitrator.

If the Employer fails to send to the contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the Employer a panel of three names of persons who shall all be unconnected with either party. The Employer shall on receipt appoint him as the Sole Arbitrator. If the Employer fails to select the person and appoint him as the Sole Arbitrator within 30 days of receipt of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons from panel as the Sole Arbitrator and communicate his name to the Employer. If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.

The work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing date of the first hearing.

The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his Sole discretion.

The award of the Arbitrator shall be final and binding on the both the parties.

Subject to aforesaid the provisions to the Arbitration Act. 1992 or any statutory modification or re-

enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

The Employer and the contractor hereby also agree that arbitration under clause shall be condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration

SPECIALCONDITIONSOFCONTRACT

1. DRAWINGS AND SPECIFICATIONS

The works shall be carried out to the entire satisfaction of the EMPLOYER and the Architect, in accordance with the signed drawings and specifications and such further drawings and details as maybe provided by the Architect/Employer, and in accordance with such written instructions, directions and explanations as may from time to time be given by the Employer/Architect, whose decision as to the sufficiency and quality of the work and materials shall be final and binding upon all parties. If the work shown on any such further drawings or work that may be necessary to comply with any such instructions, directions or explanations, be in the opinion of the contractor or extraction that comprised in or reasonably to be inferred from the contract he shall before proceedings with such work, give notice in writing to this effect to employer/Architect, and in the event of the employer/Architects agree to the same in writing the contractor shall be entitled to an allowance in respect of such extra work as on authorized extra. If the Architect and the contractor fail to agree as to whether or there is an extra, then, if the Employer/Architect decided that the contractor is to carry out the said work, the contractor shall do so, and the question whether or not there is any extra, and it so the amount thereof, shall failing agreement, be settled by Arbitration as hereinafter provided, but such references shall in no way delay the fulfillment of this contract.

No drawings shall be taken as in itself on order for variation unless, in addition to the employer/Architect's signature, it bears express words stating that is intended to be such an order or bears are mark '**VALID FOR EXECUTION**'. No claim for payment for extra work shall be allowed unless the said work shall have been executed under the provisions of clause 6 (Authorities notices, patent right and royalties) or by the Authorities of directions in drawing of the Architect as herein mentioned.

One complete set of the signed drawings and specification and scheduled of quantities shall be furnished by the Architect to the Contractor. The Architect shall furnish within such time, as he may consider reasonable, one copy of any additional drawing, which is his opinion, may be necessary for the execution of any part of work. Such copies shall be kept at the works, and the architect or his representatives shall, at all reasonable time have access to the same and shall be returned to the Architect by the contractor before the issue of the Final certificate. The contract shall remain in the custody of the Architect, and shall be produced by him at his office as and when required by the Employer or by the contractor.

2. INSPECTION OF DRAWINGS

Before filling in the tender, the contractor will have to check up all drawings/specification and schedule of quantities, and will have to get an immediate clarification from the employer/ Architect on any point that he feels is vague or uncertain. No claim of damages or compensation will be entertained on this account.

3. EXECUTION OF WORK (PRICES TO INCLUDE)

The whole of the work is described in the contract a (including the schedule of Quantities, the specifications and all drawing pertaining there to) and as advised by Employer / Architect from time to time is to be carried out and completed in all its part to the entire satisfaction of the Employer /Architect. Any minor details of the work which may not have been definitely referred to in this contract, but which are usual in practice and essential to the work, are deemed to be include in this contract. Rates quoted in the Schedule shall be inclusive of all frights, Royalties, duties, etc., as well as transportation, so as to execute the contractor as per the rules and regulations of Local Bodies, State Government and Government of India.

The rates quoted in the tender should include all charges for:

- a) Labor, maintenance fixing, carrying, cleaning, making good, hauling, watering etc.
- b) Plant, machinery, scaffolding, framework, English ladders, ropes, nails, spikes, tools, materials

Signature of the Contractor

and workmanship protection from weather, shuttering, temporary supports, platform and maintenance of the same.

c) Covering for the walling and other works during inclement weather or striking or whenever directed as necessary.

The rates quoted by contractor shall include removal of all the existing furniture and other material & dispose them off where ever required including the furniture and material for which the contract has given the payback offer.

4. SITE SUPERVISION

The contractor shall appoint at his own cost competent and adequate number of qualified Engineers at site, for (1) joint measurements and preparations of bills, (2) for testing materials at site and out-side laboratory, (3) for other general supervision. Their appointment shall be approved by the Employer / Architect. The site Engineers shall not be removed from the site without the written consent of the Employer/Architect.

5. DIMENSIONS

Figures, dimensions, are in all case to be accepted preferences to scaled sizes. Large-scale detail take precedence over small scale drawings. In case of discrepancy, the contractor is to ask for a clarification before proceeding with the work. Accordingly, if any work is executed without prior clarification it is liable to be rejected and shall not be paid for.

6. PROGRAMME OF WORKS

Contractor shall have to prepare and submit the CPM/PERT charges for employer approval immediately after issue of the work order and display the approved charts in the site office. He shall also make bar charts indicating individual items and during the progress of work he shall update the bar charts showing the proportionate progress of work every week.

He shall strictly adhere to the program of works as per CPM/PERT charts showing the proportionate progress of work.

7. PROCUREMENT OF MATERIALS

Contractor shall procure all the materials for the work from the open market. Time is the essence of the contract. Acceptance of the completion date by the contractor shall mean that he has taken into consideration the availability of all material of approved make and quality in sufficient quantities at site to enable him to complete the entire work in the stipulated period. Contractor will get sample of all materials approved by the Employer before placing order / purchase / procurement. They shall conform to I.S. codes and or tender specification as applicable.

For all materials the contractor shall quote for the best quality of the materials of best make / source supply and it will be got approved by Employer before procurement. In case sufficient quantities of approved quality materials from approved source are not available in time, contractor may have to procure the same from neighboring ADMINISTRATIVE with longer leads as required and directed at no extra cost. The material will be, however as per relevant I.S code as and wherever applicable.

8. UNFIXED MATERIALS

When any materials intended for the works shall have been placed at site by the Contract, such material shall not be removed there from (except for the purposes of being used on the works) without the written authority of the Employer / Architect and when the contractor shall have received payment in respect of any certificate in which the architect shall have stated that he has taken in to account to value of such unfixed materials on the works such material shall become the property of the Employer and the contractor shall be liable for any loss or damage to any such materials.

9. CUSTODY AND SECURITY OF MATERIALS

The contractor shall be responsible for the custody and security of all materials and equipment at site and he will provide full time watchman / watchmen to lock after his materials, stores, equipments etc.

10. RATES

Rates quoted by the contractor shall hold good for all the work carried out to any height and depth as shown in detailed drawings and as required and directed by the Architect.

Rates quoted by the contractor shall also hold good for any small work at any place at site.

Signature of the Contractor

11. PRICES FOR EXTRA SETC., ASCERTAINMENT

The rates of extra items will be ascertained as below

- a) The rates will be derived from the rates of items already quoted in the original tender for the extra work.
- b) Where extra work cannot be properly measured or valued, the contractor shall be allowed any work prices at the net rates stated in the tender or the priced schedule of quantities, or if not so stated, then in accordance with the local day work, rates and wages for the district, provided that in either case vouchers specifying the daily time (and if required by the Architect, the workmen's name) and materials employed at or before the end of the week following that in which the work has been executed.
- c) The measurements and valuations in respect of the extra items of contract shall be completed with-
in the 'period of final measurement' or within three months of the completion of the contract works as defined under clause (Certificate of Virtual Completion)

12. EXTRA ITEMS RATES

The work or extra items shall be started only after the approval of extra items rates by client / Architect. Rates for additional or extra items work which cannot be derived from the contract item rates shall be calculated on the basis of actual cost plus 15 % for profit and overheads.

13. DRAWINGS AND INSTRUCTIONS

A set of major drawings along with the contract documents shall be provided to the contractor. For any clarifications or further drawings are required by the contract, during or before the start of construction work, the Contractor shall inform the employer/Architects in writing to provide the same. Working details will be given to the contractor from time to time during the progress of work as and when required. In case of other drawing is required by the contractor he will give a minimum ten days' notice to the Employer/ Architect.

14. FAILURE BY CONTRACTOR COMPLY WITH ARCHITECT EMPLOYER'S INSTRUCTIONS

If the contractor after receipt of written notice from the employer/architect requiring compliance with such further drawings and / or instruction, fails within seven days to comply with the same, the Employer / Architect may employ and pay other persons to execute any such work whatsoever as maybe necessary to give effect thereto and all cost incurred in connection there with shall be recoverable from the contractors by the Employer as a debit or may be deducted from any money due or which become due to the Contractors.

15. INFORMATION TO BE SUPPLIED BY THE CONTRACTOR

The contractor shall furnish the Employer/Architect the following:

- a) Detailed industrial statistics regarding the labor employed by him etc.
- b) The Power of Attorney, name and signature of his authorized representative who will be in charge for the execution of work
- c) The list of technically qualified persons employed by him for the execution of this work.
- d) The total quantity and quality of materials used for the works.
- e) The list of plant and machinery employed for this work.

16. ARCHITECT'S DELAY IN PROGRESS

The Architect may delay the progress of the works in case of rains or otherwise, without vitiating the contract and grant such extension of time with the approval of the employer for the completion of the contract as he may think proper and sufficient in consequences of such delay, and the contractor, shall not make any claim for compensation or damage in relation thereto.

17. FORCE MAJEURE

Neither party shall be held responsible by the other for breach of any condition of this agreement attributable to any 'Act of God' Act of state, lockout of control or any other reason, beyond the control of

the parties and any breach of clauses arising from much force majeure conditions as aforesaid shall not be regarded as a breach of the provision of this Agreement.

18. INCOME-TAX&GST

Income Tax GST IT shall be deducted at source by the client from the contractor's interim and final bill payments as per Statutory Regulations.

19. SITE MEETINGS

A senior representative of the contractor shall attend weekly meetings at works site and in addition meetings as and when arranged by employer / Architect to discuss the progress of the work and sort out problems, if any and ensure that the work is completed in the stipulated time.

20. SCHEDULE OF APPROXIMATE QUANTITIES AND RATE

1. The quantities given herein are approximate and they are subjected to alterations omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of the work to be done.

2. It is to be expressly understood that the measured work is to be taken net (notwithstanding) any custom or practice to the contrary according to the actual quantities when in place and finished according to the drawings or as may be directed from time to time by the employer and the cost calculated by measurements or weight, at the respective prices, without any additional charge for any necessary or contingent works connected therewith. The rates quoted are for work in site and complete in every respects.

3. If any operation of work, which is specified in the respective items mentioned in the schedule of quantities, is not executed by the contractor then proportionately the rate quoted in the schedule shall be re-fixed.

21. ACTION WHERE THERE IS NO SPECIFICATION

In case of any class of work for which there is no specification mentioned, the same will be carried out in accordance with the Indian Standards Specifications subject to the approval of the Employer / Architect

22. ACCIDENT AT SITE

The contractor shall be responsible for the safety of persons employed by him on the works. This shall be without prejudice to the responsibility of the contractor under the Insurance Clause of the general conditions. Contractor shall take all precaution detailed in the safety code attached separately.

23. TYPOGRAPHICAL CLERICAL ERRORS

The Employer / Architect clarification regarding partially omitted particulars of typographical or Clerical errors shall be final and binding on the contractors.

24. WORK PERFORMED AT CONTRACTOR'S RISK

The contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, goods, signs, temporary passages or other protection necessary for the purpose. All works shall be done by the contractor's risk and if any loss or damage shall result from fire or from others cause, the contractor shall promptly repay or replace such loss or damage free from all expenses to the employer.

The contractor shall be responsible for any loss or damage to materials, tools or other articles used held for use in connection with the work. The work shall be carried on to completion without interferences with the operations of existing machinery or equipment, if any.

25. SPECIAL CONDITIONS OF CONTRACT

In the event of any discrepancy with clauses mentioned anywhere else in the tender with the clauses mentioned within special conditions of contract, the clauses mentioned within the special conditions of contracts shall supersede those mentioned elsewhere.

26. CONTRACTOR'S LABOUR REGULATIONS

Short title:

1. These regulations may be called the "contractor labour regulations."
 2. **Definitions** :- in these regulations, unless otherwise expressed or indicated, the words and expressions shall have the meaning hereby assigned to them respectively, that is to say:
 - (i) "Labour" means worker employed by the bank's contractor directly or indirectly through _____ a sub-contractor or other persons or by an agent on his behalf of a payment not exceeding Rs. _____/- per month and will not include supervisory staff like overseers etc.
 - (ii) "fair wages" means wages whether for time or piece work notified at the time of inviting tenders for the work and where such wages prescribed by the government of India in the ministry of labour and employment vide S I.No. 1917 published in the gazette of India, extraordinary part – ii section (3) sub-section (ii) dated 19-5-1969.
 - (iii) "contractors" shall include every person whether a sub-contractor or headman or agent employing labour on the work taken on contract.
 - (iv) "Wages" shall have the same meaning as defined in the payment of wages act and includes time and piece rate wages.
2. a. Normally working hours if an adult employee should not exceed 9 hours a day and in case of a child 4 1/2 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
 - 2.b. When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week. He shall be paid overtime for the extra hours put in by him at double the ordinary rate of wages. Children shall not be made to work extra.
 - 2.c. Every worker shall be given a paid weekly holiday normally on Sunday in accordance with the provisions of minimum wages (central) rules, 1960 as amended from time to time irrespective of whether such worker is governed by the minimum wages act 1948 or not.
- 3 Display of notice regarding wage etc. the contractor shall:
- (a) Before the commences his work on contract, display and correctly maintain and continue to display correctly maintain in a clean legible condition in conspicuous places on the work, notice in English and in the local Indian language spoken by the majority of workers, giving the rate of wages which have been certified by the executive engineer, ZONAL labour commissioner fair as wages and the hours of work for which such wages are earned, and
 - (b) Send a copy of such notices to the certifying officer.
- Payment of wages under central govt. wages act:-
 - (i) Wages due to every worker shall be paid to him direct.
 - (ii) All wages shall be paid in current coin or currency or in both.
 - (iii) Arrears claimed after 3 months after the completion of the work shall not be entertained.
 - Fixation of wage periods:-
 - (i) The contractor shall fix the wage periods in respect of which the wages shall be payable. The minimum daily rates of wages fixed under notification of the government of India in the ministry of labour and employment no. 1972 dated 10-5-78 are inclusive of wages for weekly day of rest and the question of extra payment for week holiday would not arise.
 - (ii) No wage period shall exceed one month.
 - (iii) wages of every employed on the contract shall be paid (a) in case of establishments in which wage period is one week within 3 days from the end of the wage period and (b) in the case of other establishments before the expiry of the 7th day or 10th day from the end of the wages period according to the number of

workers employed in such establishment does not exceed 1000 or exceeds 1000.

(iv) When the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry the day exceeding the one on which his employment is terminated.

(v) All payment of wages shall be made on a working day except when the work is completed before the expiry of the wage period in which case final payment shall be made within 48 hours of the last working day at work site and during the working time.

Note: The term "working day" means a day on which work on which the labour employed is in progress.

6. wage book and wage slip etc.: the contractor shall maintain a wage book of each worker in such form as may be convenient at the place of work, but the same shall include the following particulars

:-

- (a) Name of the worker.
- (b) Rate of daily or monthly wages.
- (c) Nature of work on which employed.
- (d) Total number of days worked during each wage period.
- (e) Dates and periods for which worked overtime.
- (f) Gross wages payable for the work during each wage period.
- (g) All deductions made from the wage with an indication in each case of the ground for which the deduction is made.
- (h) Wages actually paid for each wage period.
- (i) Signature or thumb impression of the worker.
- (j) The contractor shall also issue a wage slip containing the aforesaid particulars to each worker employed by him on the work at least a day prior to the day of disbursement of wages.
- (k) The contractor shall issue the employment card in the prescribed form iii to each worker on the day of work entry into his employment. If the worker has already any such card with him from the previous employer, the contractor shall merely endorse that employment card with relevant entries. On termination of employment the employment card shall again be endorsed by the contractor and returned to the worker.

(l) **The contractor shall issue an attendance-cum-wages card as per form:**

Attached to each worker on the day of each worker on entry into his employment.

7. Register of unpaid wages: –the contractor shall maintain a register of unpaid wages in such form as may be convenient at the place of work but the same shall include the following particulars:

- (a) Full particulars of the labourers where wages have not been paid.
- (b) Reference number of the muster roll and wage register.
- (c) Rate of wages.
- (d) Wage period
- (e) Total amount not paid
- (f) Reasons for not making payment
- (g) How the amount of unpaid wages was utilized.
- (h) Acquaintance with dates.

8. Register of accidents: the contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:

- (a) Full particulars of the labours who met with accident.
- (b) Rate of wages.
- (c) Sex
- (d) Age
- (e) Nature of accident and cause of accident.
- (f) Time and date of accident
- (g) Date and time when admitted in hospital
- (h) Date of discharge from the hospital
- (i) Period of treatment and result of treatment.

Signature of the Contractor

- (j) Percentage of loss of earning capacity and disability as assessed by the medical officer.
- (k) Claim required to be paid under worker's compensation act.
- (l) Date of payment of compensation.
- (m) Amount paid with details of persons to whom the same was paid.
- (n) Authority by whom the compensation was assessed.
- (o) Remarks.

9. Fines and deductions which may be made from wages:

- (i) The wages of a worker shall be paid to him without any deduction of any kind except the following:
 - (a) Fines.
 - (b) Deduction for absence from duty i.e. from the place or the places whereby terms of his employment he required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - (c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - (d) deduction for recovery of advances or for adjustment of over-payment of wages, advance granted shall be entered in a register.
 - (e) Any other deduction which the central government may from time to time allow.
- (ii) no fine should be imposed on any worker save in respect of such acts and omission on his part as have been approved by the regional labour commissioner.
- (iii) no fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- (iv) the total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of wages, payable to him in respect of that wage period.
- (v) no fine imposed on any worker shall be recovered from him by installment, or after the expiry of sixty days from the date on which it was imposed.
- (vi) every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

10. Register of fines, etc.:

- (i) The contractor shall maintain a register of fines and a register of deduction for damage or loss in form nos. 1 & 2 respectively which should be kept at the place of work.
- (ii) The contractor shall maintain both in English and the local Indian language, a list approved by the REGIONAL labour commissioner clearly stating the acts and omissions for which penalty or fine may be imposed on a workman and display it in a good condition in a conspicuous place of the work.

11. Preservation of registers: – the wage book the wage slips, the register of unpaid wages, the register of accidents, the register of fines, deductions required to be maintained under these regulations shall be preserved for 45 days after the date of last entry made in them and shall be made available for inspection by the engineer-in-charge labour welfare officer or any other officer authorized by the REGIONAL labour commissioner in this behalf.

12. Powers of labour welfare officer to make investigation or enquiry

The labour welfare officer or any other person authorized by the central government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of the fair wage clauses and provisions of these regulations. He shall investigate into any complaint regarding the default made by the contractor or sub-contractor in regard to such provision.

13. Report of labour welfare officer

The labour welfare officer or other persons authorized as aforesaid shall submit a report of result

of his investigation or enquiry to the executive engineer concerned indicating the extent, if any, to which the default has been committed, with a note that necessary deduction from the contractor's bill be made and the wages and other dues be paid to the labours concerned. In case an appeal is made by the contractor under clause 14 of these regulations actual payment to the labours will be made by the executive engineer after the zonal labour commissioner has given his decision on such appeal.

□ The executive engineer shall arrange payments to the labours concerned within 45 days from the receipt of the report from the labour welfare officer or the zonal labour commissioner as the case maybe.

14. Appeal against the decision of labour welfare officer:

Any person aggrieved by the decision and recommendations of the labour welfare officer or other person so authorized may appeal against such decision to the zonal labour commissioner concern within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the executive engineer concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15. Prohibition regarding representation through lawyer:

(a) A workman shall be entitled to be represented in any investigation or enquiry under this regulation by:

(a) An officer of a registered trade union of which he is a member.

(b) An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.

(c) Where the employee is not a member of any registered trade union, by any officer, of a registered union, connected with, or by any other workman, employed in the industry in which the worker employed.

(ii) An employer shall be entitled to be represented in any investigation or enquiry under this regulation by;

(a) An officer of any association of employers of which he is a member.

(b) An officer of a federation of association of employers to which the Association referred to in clause (a) is affiliated.

(c) Where the employer is not a member of any association of employers' by an officer of association of employers connected with or by any other employer, engaged in the industry in which the employer is engaged.

(iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

16. Inspection of books and slips: The contractor shall allow inspection of the wage books and the wage slips the register of unpaid wages, the register of a accident, and the register of fines and deduction to any of his workers or to his agent at a convenient time and place after due notice is received to the labour welfare officer or any other person authorized by the central government on his be-half.

17. Submission of returns:

The contractor shall submit periodical returns as maybe specified from time to time.

□ **Amendment:** the central government may from time to time add to or amend the regulation and on any question as to the application, interpretation or effect of these regulations the decision of the REGIONAL labour commission or deputy REGIONAL Labour commission to the government of India, or any other person authorized by the central government in that behalf shall be final.

□ **Safety code**

Scaffolds:

(i) Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. when a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder used for carrying material as will, suitable footholds and

hand holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 to 1(1/4) horizontal and 1 vertical)

(ii) Scaffolding or staging more than 4m. above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached bolted, braced and otherwise secured at least 3 feet high above the floor or platform of such scaffoldings or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

(iii) Working platform, gangways, and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 12 feet above the ground level on the floor level. They should be closely boarded, should have adequate width and should be suitably fastened, as described in (ii) above.

(iv) Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be -3'0". Wherever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.

(v) Safe means of access shall be provided to all working platforms and the working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. In length while the width between sides rail in rung ladder width shall in no case be less than 290mm. For ladder up to and including 3m. In length. For longer ladders this width should be increased at least 20mm. for each additional meter or length.

(vi) A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the engineer obtained prior to construction.

Othersafety measures

(vii) All personnel of the contractor working within the plant site shall be provided with safety helmets. All welders shall wear welding goggles while doing welding work and all metal workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.

(viii) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

FORM OF AGREEMENT

ARTICLES of AGREEMENT made this _____ day of _____ year 2023 between the **THE REGIONAL MANAGER, SBI** (Hereinafter referred to as the "Employer/Owner/client" which expression shall, unless excluded by or repugnant to the context, includes its successors and assigns) of the ONE PART and _____ of _____ (Hereinafter referred to as "Contractor" unless excluded by or repugnant to the context, includes its successors and assigns) of the OTHER PART.

WHEREAS the Employer intends to carry out (**PROPOSED ELECTRICAL WORKS FOR SBI AMRITSAR ROAD BATALA BRANCH (PUNJAB.)**) shall here in after referred to as "Project".

AND WHEREAS for the purpose of the above said project, the Employer invited sealed tenders from experienced, resourceful and bonafied contractors vide his Notice Inviting Tender (NO. _____ dated.).

WHEREAS the contractor submitted his Tender Documents containing Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates, Form of Agreement, General Specification, Approved manufacturers/ natural source of materials, Declaration, Technical Specifications as in Schedule of Quantities etc. for the above said project, (Hereinafter collectively referred to as the "said conditions"), duly signed on each page as a token of his acceptance of the same, along with requisite Cost of tender and Earnest Money Deposit

AND WHEREAS out of the tenders received, the Tender of the contractor was found to be most suitable for the project.

AND WHERE AS the Employer has accordingly issued the work order (NO. dt. _____) to the contractor subject to his furnishing the requisite Security Deposit.

AND WHEREAS the Contractor has accepted the aforesaid Work Order vide his letter of acceptance NO. _____ dt. _____ And has also deposited with the Employer a sum of Rs. _____ Which with the Earnest Money of RS. _____ Forms the requisite Security Deposit @ 2% of the accepted Tender Value of Rs. _____.

NOW, therefore, it is hereby agreed to and between the parties as follows:

1) Contract documents

The following documents shall constitute the Contract Documents.

I. This Article of Agreement.

II. Tender Documents submitted by the Contractor including the "said conditions", N.I.T and Schedule of quantity.

III. All correspondence between the Employer and the Contractor from the date of issue of N.I.T and the date of issue of work order.

IV. Work order No. _____ dt. _____

2) In consideration of the payments to be made to the Contractor as hereinafter provided the Contractor shall upon and subject to the said conditions, execute and complete the contracted project works shown upon the said drawings etc. and such further detailed drawings as may be furnished to the contractor by the said Employer and described in the said Specifications and the said Schedule of Quantities.

3) Notwithstanding what are stated in the N.I.T conditions of Tendering, Conditions of Contract of here in stated before, the Employer reserves itself the right of altering the drawings and the nature of the work and addition to or omitting any items of work or of having portions of same carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice to this contract.

4) As mentioned in Article 1 above, the "said conditions" shall be read and be treated as
Signature of the Contractor

forming part of this agreement and parties hereto will respectively be bound thereby and to abide by and submit themselves to the conditions and stipulations and perform the same on their parts to be respectively observed and preferred.

5) Any dispute arising under this agreement shall be referred to the Arbitration in a manner specified in the General Conditions of the Contract and all legal disputes shall be limited within the territorial jurisdiction of the Pathankot thereto. The decision of the arbitration shall be final and binding on both the parties.

IN WITNESS WHERE OF THE PARTIES to the present have here under set and subscribed their hands, the day, month and year first above written.

Signed and delivered for and on behalf of

State Bank of India, Shri. _____ its duly authorized official, In the presence of –

1. (Name and Address)

2. (Name and Address)

Signed and delivered for and on behalf of

The Contractor _____ by Shri _____ his duly authorized official, in the presence of –

1. (Name and Address)

2. (Name and Address)

THE REGIONAL MANAGER, SBI

READ, UNDERSTOOD AND ACCEPTED

**SIGNATURE OF THE CONTRACTOR WITH
SEAL DATE**

DECLARATION

TO
THE REGIONAL MANAGER
STATE BANK OF INDIA
Regional Business Office-5
Pathankot.

NAME OF THE WORK: PROPOSED ELECTRICAL WORKS FOR SBI AMRITSAR ROAD BATALA BRANCH (PUNJAB.)

I/We _____ have inspected the site of works and have made me / us fully acquainted with the local conditions in and around the sites of works. I/We hereby declare that I/We have gone through the conditions laid down in the Notice Inviting Tender, Conditions of Contract, Technical Specifications, Bill of Quantities, approved makes and understood the same and on the basis of the same I/We quoted our rates in the Schedule of Quantities attached with the tender documents.

We accept all the terms and conditions of tender documents. We will abide by the technical specification mentioned in the tender. We here by undertake to use only specified material/ make as per the tender schedule.

I undertake to submit a hard copy & scanned copy of the tender duly signed on all pages of the tender at your office.

For any type of deviation (to any of above or subsequent instructions), it will be my/ our responsibility to obtain the written instruction of the Engineer-in-charge for the same failing which it shall be deemed that I have carried out any such deviations at my own and I shall be duty bound to replace the all deviated material/ works from the site at my/ our cost as well as I shall be liable to penalized by the employer as deemed fit and for all such loses made thereof, I/ we shall not have any right to arbitrate in any manner.

I/We shall also uniformly maintain such progress as may be directed by the Employer / Architect to ensure completion of same within the target date as mentioned in the tender document.

Witness: _____

Signature of Tender

Address _____

Date: _____

SCHEDULE OF APPROXIMATE QUANTITIES AND RATES

I. The quantities given herein are those upon which the lump sum cost of the work is based. They are subjected to alterations omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of the work to be done. The unit rate noted below are those governing payment of extras or deductions for omissions, according to the conditions of the contract as set forth in the preliminary specifications of the Bank detailed standard specifications and other conditions or specifications of this contract.

II. It is to be expressly understood that the measured work is to be taken net (notwithstanding) any custom or practice to the contrary according to the actual quantities when in place and finished according to the drawings or as may be directed from time to time by the Architects, and the cost calculated by measurements or weight, at the respective prices, without any additional charge for any necessary or contingent works connected there with. The rates quoted are for work in site and complete in every respects.

III. If any operation of work, which is specified in the respective items mentioned in the schedule of quantities, is not executed by the contractor then proportionately the rate quoted in the schedule shall be re-fixed.

SIGNATURE OF THE CONTRACTOR
WITH DATE

SPECIFICATIONS FOR ELECTRICAL WORKS

General:

The scope of work covers execution and completion of the electrical installation work of the proposed **ELECTRICAL WORKS FOR STATE BANK OF INDIA SBI AMRITSAR ROAD BATALA BRANCH.** in accordance with drawings & specifications.

Rules & Regulations:

The installation shall be generally carried out in conformity with the requirements of Indian Electricity Act 1910 (as amended up to date) and the latest Indian Electricity Rules and supplementary Regulations of the State Electricity Departments and Electricity Undertakings and where the installation is subject to inspection and approval of Fire Insurance and Explosives Authorities, such installation shall be planned and executed to conform to their special Rules.

Point Wiring:

Supply:

The following material shall be included in point wiring and accessories.

- a) Conduit - PVC rigid 2.0mm thick conduit and accessories.
- b) Wires - PVC insulated copper conductor multi-stranded flexible type wires ISI mark of 1.0, 1.5, 2.5, 4.0, 6.0, 10, 16sq.mm
- c) Switches - 5 Amp single pole, two way switch, 5 amp socket, 15 Amp switch and socket, fan Regulators with flush metal boxes wherever concealed and front plates and boxes of company make for surface mounting all of approved make.
- d) Cover plates for outlet boxes - 3 mm thick Formica / Hylam sheet especially for electrical purposes.
- e) Hardware - screws and washers non rusting type brass type.
Switch Boards and outlet Boxes - Factory made boxes of approved make for flush mounting for switches and accessories and 16 SWG m.s. sheet with GI boxes as outlet boxes with knock-outs for conduit entries and tapped holes for screws.
Holders - Pendant holders / angle holders / ceiling rose etc. of approved make white in color.
- g) Industrial Sockets - Industrial type metal clad with metallic top.

Installation:

All conduit shall be concealed / surface mounted in / on walls, beam, column, slabs or concealed in false ceiling in all A/C areas etc. by necessary chasis or clamping with saddles, spacers of hot deep GI. made. Chasis shall be made in walls to conceal the conduits and then refilling of the chasis with cement mortar. All switch boards and outlet boxes (placed for bracket wall points) shall be concealed / surface in/on walls and should be kept in line and level with help of spirit level. Fan boxes shall be provided with nut welded on top with threaded hook and check nut. Wire drawing should be done with the help of draw wire. The conduits shall be cleaned of all foreign materials before inserting the

wires Drawing of wires should be done such that the insulation of wires is not damaged.

All works shall be done as per instruction and satisfaction of the Consultant.

For surface conducting wiring, the conduit fitting switch/ceiling fan regulator boxes etc. shall be installed surface exposed. Flexible conduits shall not be used earth continuity conductors. Separate earth wire shall be provided either inside or outside the flexible conduits which shall be connected by means of earth clips to the earth system at one end and to the equipment at the other end as per IS3043-1987.

Size of wire shall be chosen to limit Voltage drop within 5 %. Area of conductor shall be 1.0, 1.5, 2.5, 4.00 and 10.0 sq. mm copper. Generally not more than 8 to 10 points shall be wired in one circuit.

Testing:

After completion of wiring, installation of switches etc., testing shall be done for insulation resistance as specified in the tender Notes No Joints shall be allowed in any wires in the conduits, all wires shall only be joined and connected at termination points. All circuits shall have individual neutrals and one neutral shall riot complete the whole wiring system.

Circuit's mains shall start from Distribution board to switch board or from Meter board to Distribution. The circuits mains includes supply and installation of two nos. of wires with earth wire for single phase mains and Four nos. of wires with earth wire for three phase mains.

Supply:

- a) Conduit - PVC rigid 2.0mm thick conduit and accessories.
- b) Wires - PVC insulated copper conductor multi-stranded flexible type wires ISI mark of 1.0, 1.5, 2.5, 4.0, 6.0, 10, 16sq.mm

Installation:

a) For conceal wiring system all conduits shall be laid in the slab before casting of slab and shall be concealed in walls by making charts in walls and refilling the same before the final plaster of wall is done. All the switch boards and outlet boxes also shall be installed concealed in line and level.

b) For surface wiring system all conduits / PVC trunking shall be clamped with hot deep Gl. saddles / spacers on wall, ceiling, beam, column etc. in line align with the help of spirit level. All the switch boards and outlet boxes shall be surface mounted type and to be installed in line and level.

c) Wires shall be drawn in conduit after cleaning of conduits and drawn with the help of draw wires. No damage to the insulation of wires should be done while drawing.

Testing:

After completion of wiring, installation of switches etc. testing shall be done for insulation resistance as specified in the tender.

Distribution Boards:

Supply:

Distribution boards shall be of sheet metal with rated bus bars, factory made. They shall be for three-phase or single phase distribution system as per the requirements or

schedule of quantities.

Installation:

The distribution board shall be concealed in wall, flush mounted or surface mounted and should be in line and level. These shall be factory tested. Final MCBs on sub circuits shall be marked by permanent markers on the DB door

Test:

After installation of MCBs, it shall be tested.

M.C.B &ELMCB.

Supply:

MCB: These shall be SP.SPN.TP or TPN as specified in drawings rating of 2A, 6A, 16A, 25A, 30A, 63A.10KA fault level, as per IS-8828--S978; BS 3871-part I.

ELMCB: These shall be of SPN. TPN and specified in drawings of rated value. ELMCB - BS-4293 neutral advance feature at closing neutral will be first to contact at the time of opening neutral breaks last after allowing the phases to open first Since the ELCB is to be used as main switch, it shall have safe interrupting clearance as per IEC 408/IS 4064. The ELCB shall have terminals to terminate aluminum conductor up to 25 mm². The ELMCB shall have sensitivity of 30 - 300 ma as per requirements

Installation:

All ELMCB and MCBs shall be installed in the DB on din rail provided in the DB, spares shall be blocked by blank plates.

Testing:

All ELMCB should be tested for overloading, short circuit, earth leakage tripping and MCBs should be tested for overloading and short circuit tripping

5.0 Material:

All materials, fittings and appliances used in the electrical installation shall be of the best quality of approved manufacturer and shall conform to the latest Indian Standard Specifications wherever these exist.

6.0 Workmanship:

Good workmanship and neat appearance are the prerequisites for compliance with the various sections of these specifications. The work shall be carried out under direct supervision of a person holding Certificate of Competency issued by the State Government and in accordance with the statutory rules and regulations in force. The relevant ISI code of practice shall be followed wherever applicable.

7.0 Drawing:

The set of all relevant electrical drawings, with specifications are furnished to the Contractor for his own use until the completion of the contract. However wherever required, detailed drawings shall be prepared and got approved.

On completion of the work, completion drawings shall be prepared and five copies of the same should be submitted to the Employer. The completion drawings shall indicate clearly the main switch board, the runs of various mains and sub-mains, position of points and their controls. All circuits shall be clearly indicated and numbered in the wiring diagrams and all points shall be given the same number as the circuit to which they are electrically connected.

8.0 Marking & Apparatus:

When a board is connected to voltage higher than 250 volts, all the terminals or leads of the apparatus mounted on it shall be marked in the following colors to indicate the different poles or phases to which the apparatus or its different terminals may have been connected.

Three Phases --	Red, Blue & Yellow Neutral	--Black
Off wire	-- White or Grey	
Earth wire	--Green	

Where four wire three phase wiring is done, the neutral shall be in black color and the other three wire in another color. Where has more than one switch, each such switch shall be marked to indicate which section of the installation it controls. The main switch shall be marked as such and where there is more than one main switch is the building, each such switch shall be marked to indicate which section of the installation it controls.

All marking required under this clause shall be clear and permanent.

9.0 Materials:

All materials used in the construction of fittings shall be of such quality, design and construction that will provide adequate protection in normal use against mechanical and electrical failures and exposures to the risk of injury or electric shock and shall withstand the effects of exposure to atmosphere.

10.0 Ceiling Rose:

Ceiling rose and similar attachments - A ceiling rose or any other similar attachments shall not be used on a circuit, the voltage of which normally exceeds 250 Volts. Normally only one flexible cord shall be attached a ceiling rose. Specially designed ceiling roses shall be used for multiple pendants

11.0 Socket Outlets & Plugs:

A socket outlet shall not embody fuse terminals as an integral part of it. But the fuse may be embodied in plug in which case the plug shall be non-reversible and shall be so arranged and connected that the fuse is connected to an outer or phase conductor or the non-earthed conductor of the circuit. Every socket outlet shall be controlled by switch will be on the live side of the line. In an earthed system of supply, the outlet and plug shall be three pin type and the third terminal connected to earth.

Every lighting fitting shall be controlled by a switch and where control at more than point is necessary by as many as two ways and intermediate switches as there are control points. Lights, fans and socket outlets shall be so located as to provide maximum comfort to the occupant and to enable him to utilize the electricity in the most economical manner.

Where conductors are required to be drawn through tube or channel leading to the fittings, the tube or channel must be free from sharp angles or protecting edges and of such size as

will enable them to be wired with the conductors used for the final sub- circuit without removing the braiding or taping. As far as possible all tubes or channels should be of sufficient size to permit looping back.

c) Where a light fitting is supported by one or more flexible cords, the maximum weight to which the twin flexible cords can be subjected shall be as follows:

<u>SIZE OF TWIN FLEXIBLE CORDS</u>						
Nominal cross sectional		No. & diameter area of in wires			Maximum permissible weight	
Sq.Inch	Sq.mm.	Sq.Inch	Sq.mm.	Sq.Inch	Sq.m m	
0.006	0.5	14/0.0076	14/0.193	1.4		3
0.0010	-	23/0.0076	23/0.93	2.3		5
0.0017	1.5	40/0.0076	40/0.193	4.3		10

Where a weight is greater than 4.5kgs.(10 Lbs) then it has to be supported, two or three twin flexible cords shall be used so that the maximum weight to which any cord is subjected does not exceed the above values, or Alternatively other support viz. suitable metal pipe or suitable support shall be provided.

No inflammable shade shall form a part of a light fitting unless such shade is well protected against all risks of fire. Celluloid shade or light fitting shall not be used under any circumstances.

Enclosed type fittings shall be provided with a removable glass receptacle, arranged to enclose the lamp completely and of such size or construction as to prevent undue heating of the lamp or if the position of fitting be such that the glass receptacle is liable to mechanical damage the glass shall be protected by a suitable wireguard.

12.0 Fittings Wire:

The use of fitting wire shall be restricted to the internal wiring of the lighting fittings. Where fittings wire is used for wiring fittings, the sub-circuit leads shall terminate in a ceiling rose or connector from which they shall be carried into the fittings.

13.0 Lamp Holders:

Lamp holders for use on brackets and the like shall have not less than 1.3 cm (1/2") nipple and all those for use with flexible pendant shall be provided with cord grips. All lamp holders shall be provided with shade carriers. Where centre contact Edison screw lamp holders are used, the outer or screw contact shall be connected to the ' middle wire ' or the neutral or to the earthed conductor of the circuit.

14-0 Lamps:

All incandescent lamps, unless otherwise required, shall be hung at height of 2.5m (8 ft.), above the floor level they shall be provided with caps of the following patterns:

- Upto and including 200 watt. - Standard Bayonet (B)
- Above 200 watts and not exceeding 300 watts -
- Above 300 watts -

15.0 Fans, Regulators and Clamps:

ii) Exhaust fans shall be erected at the places indicated by the Architects. For fixing an exhaust fan, a circular hole shall be provided in the wall to suit the size of the frame, which shall be fixed by means of rag bolt embedded in the wall. The exhaust fan shall be aired as near to the hole as possible by means of a flexible cord, care being taken that the blades rotates in the proper direction.

TESTING OF INSTALLATION

16.0 Insulation Resistance:

The insulation resistance shall be measured by applying between earth and the whole system of conductors or any section thereof with all fuses in place and all switches closed and except in earthed concentric wiring all lamps in position or both poles of the installation otherwise electrically connected together, a direct current pressure of not less than twice the working pressure provided that it need not exceed 500 volts for medium voltage circuits. Where the supply is derived from the three wire (AC or DC) or a poly phase system, the neutral pole of which is connected to earth either direct or through added resistance, the working pressure shall be deemed to be that which is maintained between the outer or phase conductor and the neutral.

The insulation resistance measured as above shall not be less than 50, divided by the number of points on the circuits provided that the whole installation shall be required to have an insulation resistance greater than one mega ohm.

Control rheostats, heating and power appliances and electrical signs may, if required, be disconnected from the circuit during the test, but in that event the insulation resistance between the case of frame work and all live parts or each rheostat appliance and sign shall not be less than that specified in the relevant IS specifications shall not be less than half a megaohm.

The insulation resistance shall also be measured between all conductors connected to one or phase conductor of the supply and all the conductors connected to the middle wire or the neutral or to the other pole or phase conductors of the supply and its value shall not be less than that specified in sub clause(b)

On completion of an electric installation (or an extension to an installation) a certificate shall be furnished by the contractor countersigned by the qualified supervisor the installation was carried out. The certificate shall be in the prescribed form as required by the local Electrical Supply Authorities. One such recommended form is given in Appendix-B.

Testing of earth continuity path: The earth continuity conductor including metal conduits and metallic envelopes of cables in all cases shall be tested for electric continuity and the electrical resistance of the same along with the earthing lead but excluding any added resistance or earth leakage circuit-breaker measured from the connection with the earth electrode to any point in the earth continuity conductor in the completed installation shall not exceed one ohm.

Testing of polarity of non-linked single pole switches:

In a two wire installation a test shall be made to verify that all non-linked single pole switches have been fitted in the same conductor throughout and such conductor shall be labeled or marked for connection to an outer of phase conductor or to the non-earthed conductor of the supply.

In a three wire or a four wire installation, a test shall be made to verify that every non-linked single pole switch is fitted in a conductor which is labeled or marked for connection to one of the outer or phase conductor of the supply.

17.0 CONDUIT CAPACITY:

Maximum number of PVC insulated cables conforming to IS: 694-1977 that can be drawn in one conduit shall be as follows:

Nominal cross sectional area of conductor SIZE OF CONDUIT

64mm	20 mm 25mm 32mm 38mm 51mm S					
	B	S B	S B	S B	S B	S
B						

1.5	5 4	10 8	18 12	--	--	--
2.5	5 3	8 6	12 10	--	--	--
4	3 2	6 3	10 8	--	--	--
6	2 -	5 4	8 7	--	--	--
10	2 -	4 3	6 5	8 6	--	--
16	- -	2 2	3 3	6 5	10 7	12 8
25	- -	- -	3 2	5 3	8 7	9 7
35	- -	- -	- -	3 2	6 5	8 6
50	- -	- -	- -	- -	5 3	6 5
70	- -	- -	- -	- -	4 3	5 4

NOTE:

1. The above table shows the max. Capacity of conduits for a simultaneous drawing of cables.
- 2 The columns headed 'S' applies to runs of conduit which have distance not exceeding 4.25m between draw in boxes and which do not deflect from the straight by an angle of more than 15 The columns headed 'B' apply to runs of conduit which deflect from the straight by an angle of more than 15.

CABLES

Cables shall be supplied by Electrical Contractor.

Cable Specifications:

All cables shall be as per latest IS 1554 Part I PVC insulated heavy duty electric cables Part I for working Voltages up to and including 1100 V.

All power cables shall be PVC insulated, armored, inner sheathed, PVC insulated aluminum conductor. Control cables shall be of copper conductor.

The core insulation and inner sheath shall conform to the requirement of Type A IS 5831 STI IS respectively. Similarly for outer sheath. Cables shall have amount of steel wire upto OD of 18 mm and flat steel strip for higher OD.

Cables shall be supplied in drums of 1000 mts. for and upto 6 sq mm and 10 sqmm and above in 500 mts.

Cabling:

Cabling shall be done with help of jack and rollers. Cable shall be passed through RCC Hume Pipe wherever road crossing or pathway crossing is there. All cables shall rise from cable trenches in GI Pipes. Cable shall be tagged as per cable schedule at every 30 mts. by Aluminum tags of minimum 2mm thick securely fastened. They shall also be identified near the terminations

Above the cable trenches cable route markers shall be installed as per rules and regulations at every 30 mts and at every turnings of the cables or branching of cables All cables shall be laid in trenches at a depth of 750mm and as shown in drawings. Before laying of cables sand shall be spread then the cable shall be laid which shall again be covered with sand minimum 150mm from the top of the largest dia of the cable. Then second class bricks shall be laid across the trench completely covering the trench, lastly excavated soil shall be back filled and compacted by watering intermittently

All cables after laid shall be checked for insulation level and measured before back filling. Cable entries in GI pipes or Hume pipes shall be sealed by cable compound or putty for smaller dia of pipes.

If required for the- cable- to run on cable trays then the cable shall be clamped by 16 SWG GI saddles and dampers All works should be done to the satisfaction of the Engg - in Charge.

Terminations

Cable shall be terminated by means of single compression glands and terminated by solder less crimped type lugs. All should be done to the satisfaction of the Engg.-in-Charge. If the cores do not have any color identification, then they should be identified by insulation tape of various phases. Cable shall enter any termination point by means of double compression glands, using reducers if required or drill of holes in gland plates. IF panel installed on a cable trench which does not have any bottom excess then holes shall be drilled in one line for the cables then the gland plates is cut into two halves from the centre of the hole. Cables inserted and sealed and the armour in the bottom should

open and earthed to the earth bus. Crimping of lugs shall be done by hand crimping tool or hydraulic crimping tool with conducting jelly applied to conductors. Insulation shall be cut immediately after the lugs and care should be taken that the conductor is not left open. All jointing and crimping shall be carried out by licensed and experienced jointers approved E.I.C. and termination and straight joint shall be of 'Taped' or heat shrinkable type as specified.

Testing:

Before energizing, the mugger test shall be carried out for insulation resistance between phase to phase and phase to earth.

For cable up to 1.1 KV grade 1000 KV mugger shall be used.

D.C. High Voltage test shall be conducted after installation on the following and test results are recorded as per format furnished by the Engineer-in-charge.

- a) All 1000 Volts grade cables in which straight through joints have been made.
- b) All cables above 1100 V grade.

For record purposes test data shall include the measure values of leakage current verses time.

The DC High voltage test shall be performed as detailed below in the presence of the EIC or his authorized representative only.

Cables shall be installed in final position with all straight through joints complete. Termination shall be kept on unfinished so that the motors, switchgears, t transformers, etc. are not subjected to test Voltages

The Test Voltage shall be as under:

- i) for cable 3.3KVGrade 5.4 KVDC
- ii) for cable 66KVGrade 10.8 KVDC
- iii) for cable 11KVGrade 18 KVDC

Cable schedule and layout drawings must be marked for AS BUILT conditions during the installations work and shall be approved by the Site Engg.

IDENTIFICATION OF EARTHED AND EARTHED NEUTRAL CONDUCTORS AND POSITION OF SWITCHES AND CUTOUTS THEREIN:

Where the conductors include an earthed conductor of two-wire system or an earthed neutral conductor of a multi-wire system or a conductor which is to be connected thereto, the following conditions shall be compiled with

1. An indication of a permanent nature shall be provided by the owner of the earthed or earthed neutral conductor, or the conductor which is to be connected thereto, to enable such conductor to be distinguished from any live conductor. Such indication shall be provided.

- a) Where the earthed or earthed neutral conductor is the property of the bidder, at or near the point of commencement of the supply.
- b) Where a conductor forming part of a consumer's system is to be connected to the bidder's earthed or earthed neutral conductor, at the point where such connections to be made.

c) In all other cases, at a point corresponding to the point of commencement of supply or at such other point as may be approved by an inspector.

2. No cut-out, link or switch other than a linked-switch arranged to operate simultaneously on the earthed or earthed neutral conductor and live conductor shall be inserted or remain inserted in any earthed or earthed neutral conductor of a two-wire system or in any earthed or earthed neutral conductor of a multi-wire system or in any conductor connected thereto with the following exceptions

- a) A link for testing purposes - OR-
- b) A switch for use in controlling a generator or transformer.

ELECTRICAL CODE OF PRACTICE

The following ISI code of practice for providing and installation of the electrical items shall be deemed any deviation from the code should be approved from the Electrical Inspector.

- a) ISI 694-1977 : PVC insulated cables for working voltages upto and including 1100 Volts.
- b) ISI 1554-1976: PCV insulated (heavy duty) (part-I) electric cables for working voltages upto and including 1100V.
- c) ISI 1554-1981: PVC insulated (Heavy duty) electric (PART-I) cables for working voltages from 3.3 KV upto and including 11Kv.
- d) **ISI 2551-1963: Danger noticeplates.**
- e) ISI 3043-1966: Earthing
- f) ISI 5578-1970: Guide for marking of insulated conductors.
- g) ISI 5216-1969: Guide for safety procedures and practices in ELECTRICAL WORKS.
- h) ISI 3072-1975: Installation and maintenance of switchgears.
- i) ISI 1886-1967: Installation & maintenance of transformers.
- j) ISI 1944-1970: Lighting of Public thorough fares.
- k) ISI 2309-1969 : Protection of building and allied structures against lightning.
- i) ISI 3106-1966: Selection, installation and maintenance of fuses (Voltages no exceeding 650volts).
- m) ISI 8923-1978: Warning symbol for dangerous voltages. n) ISI 2208-1962: HRC cartridge fuse links up to 650 V. o) ISI 8724-1978: Rewireable fuses upto 650V.
- p) ISI 10118-1982: Switchgear and control gear, selection, (PART-III) installation and maintenance code of practice.
Part III: Installation.
Part IV:
Maintenance.
- q) Transformers, selection, installation and maintenance of code of practice. Part II
Installation : 10028 (Part II)1981.
Part III Maintenance:10028 (Part II)1981.

GENERAL SPECIFICATION FOR PANELS (LIGHTING & POWER)

- Panel shall be fabricated from CRCA sheet, main frame with 14 SWG sheet and compartments with 16 SWG sheet
- Bus Bars shall be of Aluminum /copper (as per SLD dwgs) PVC sleeved with the rating of as stated in drawing.
- The panel shall have gone through seven tank processes and shall be painted with shade no 631 or approved, oven baked.
- Panel shall be Dust and Vermin Proof
- Cable entries shall be from the bottom / top (as per the dwg) and all gland plates are to be detachable.
- All outgoing feeders shall have elmex make terminals to be provided in cable alley compartment.
- A continuous earth bulbar to be provided at the bottom of panel.
All internal wiring / inter-connections shall be made by using copper conductor PVC insulated ISI wires (flexible type specially used in Panel) according rating of feeders
- All compartment doors shall be provided with neoprene rubber gasket and shall have door interlocking arrangement such that the compartments do not open when the switch is in ON position.

- Bus Bar alleys can be opened only with castle panel key while the Cable Alleys may have screw type knob arrangement.
- - A suitable Base frame of with ISMC channel shall be provided.
Panel should be rated for 415 V,3 phase 4 wire, 50 c/s, A.C. supply system having a fault level of 40 KA (sys) for 1 second. Ambient temperature 45 degree and temperature rise of bus bar is to be limited so that end temperature does not exceed 85 degree C. Bus bars will be mounted on epoxy insulators of adequate strength. Aluminum earth bus bar of appropriate cross section should be provided continuously at the bottom of the panel. The incoming and outgoing feeders shall be as per Single LineDiagram.

SAFETY CODE

1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
2. An injured person shall be taken to a public hospital without loss of time, in cases when the injury necessitates hospitalization.
3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used an extra handrail shall be engaged for holding ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the trench half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
7. No floor, roof or other part of the structure shall be so overloaded with debris or material as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement, mortar, concrete and lime shall be provided with protective footwear and rubber hand gloves.
9. Those engaged in welding works shall be provided with welders' protective eye shield and gloves.
10. (i) No paint containing lead or lead products shall be used except in the form of paste readymade paint.
(ii) Suitable facemasks should be supplied for use by the workers when the paint applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overalls shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during cessation of work.
12. Hoisting machines and tackle used in the works including their attachments anchor and supports shall be in perfect condition.
13. The ropes used in hoisting or lowering material or as a means of suspension shall be durable quality and adequate strength and free from defects.

Note: -

- i) The contractor should obtain prior approval from Employer / Consultants before placing order for any specific materials. Employer may change / delete any of the makes or brands out of the above list.

- ii) All materials should conform to relevant standards and codes of BIS. Materials with I.S.I. mark shall be used duly approved by the STATE BANK OF INDIA Engineer / Architect.

- iii) **If any material is found to be not up to the mark, the contractor will have to produce original bills/certificate from the manufacturer or his authorized Distributor for authenticity and genuineness of the material for consideration and as per make approved by the STATE BANK OF INDIA. The same will not be considered for payment.**

