

# **TENDER DOCUMENT**

### **FOR**

# ELECTRICAL WORK FOR CANARA BANK'S, ALTERNATE BRANCH PREMISES AT KARVE ROAD, PUNE (DP CODE: 15332)

**ARCHITECTS / ENGINEERING CONSULTANTS:** 

M/s NARENDRA SARDESHPANDE & ASSOCIATES 43, "Shreekul", Flat no. 2, Ground floor,

**United Western Housing Society,** 

Near Tathawade Garden, Karvenagar,

Pune - 411 052

Phone: 9822072016

Email: nsapune1@gmail.com

# Issued by

# **CANARA BANK GENERAL ADMINISTRATION SECTION CIRCLE OFFICE PUNE**

NEAR MANGALA THEATRE, SHIVAJI ROAD, SHIVAJINAGAR, PUNE-411005 020-25571000 (Ext-329/228) 020-25530622

Email-pecopne@canarabank.com



# GENERAL ADMINISTRATION SECTION, CO, PUNE

## NEAR MANGALA THEATRE, SHIVAJI ROAD, SHIVAJINAGAR, PUNE 411005

#### **NOTICE INVITING TENDER**

Sealed tenders are invited from Competent empanelled electrical contractors for the works mentioned below -

| 1.  | Name of the Work        | : | Electrical works for Canara Bank's alternate<br>branch Premises at Karve Road, Pune (DP Code:<br>15332) Business Centre, Plot No 15A/6, Near<br>Sinhgad College, Erandwana, Pune   |
|-----|-------------------------|---|--|
| 2.  | Cost of Tender Document | : | NIL  |
| 3.  | EMD Amount              | : | Rs.6,000/- by way of Demand Draft of a Scheduled/ nationalized Bank Drawn in favour of "Canara Bank - Circle Office" payable at "Pune". MSMEs are exempted from paying Tender fee. |
| 4.  | Time of Completion      | : | 45 days from the Day of Acceptance of the Tender by the Bank   |
| 5.  | Contents of the Tender  | : | <ul><li>(A) Notice Inviting Tender</li><li>(B) General Rules &amp; Instructions to Tenderers</li><li>(C) Price-Bid/ Bill of Quantities</li><li>(D)</li></ul>                       |
| 6.  | Date of Issue of Tender | : | From 16/05/2024 during office hours  |
| 7.  | Pre Bid Meeting         | : | on $18/05/2024$ at $4.30$ PM in CO Building, $3^{rd}$ floor, Pune  |
| 8.  | Site Visit              | : | Contractor shall at his own expense, visit the site and get acquainted with the working conditions/ society norms before submitting the tender (Address as mentioned above)        |
| 9.  | Late Date of Submission | : | Sealed Envelopes to be submitted on or before 24/05/2024 upto 03.00 pm   |
| 10. | Date of Opening         | : | Tenders will be opened on 24/05/2024 at 03.30 pm   |

#### (I) GENERAL RULES AND INSTRUCTIONS TO TENDERERS

1. Sealed Tenders are invited from competent empanelled Electrical contractors from Pune Circle (hereinafter also referred as TENDERER/ CONTRACTOR) who have been already empanelled by the Bank (hereinafter referred as the Employer and also as Bank), for - Electrical works for Canara Bank's alternate leased Branch premises at Karve Road, Pune (DP Code: 15332)

Scope of work- as mentioned in the BOQ

- 2. Site of work is at the address mentioned above (point No.1) and is available for immediate commencement of work. Tenderer shall note that the work is to be carried out in a working branch/ office/ quarters, without affecting the normal functioning of the branch/ office/ quarters. The work will be restricted to after office hours/night and holidavs.
- The tender concept is "SINGLE ENVELOPE CONCEPT".

Tender documents consisting of specifications, schedule of quantities of the various items of work to be done and the set of terms and conditions of contract can be collected personally from office of the Divisional Manager / Assistant General Manager, General Administration Section, Canara Bank Circle Office, near Mangala Theatre, Shivaji Road, Shivajinagar, Pune- 411005 between the dates mentioned in the Notice Inviting Tender (NIT).

- Cost of Tender would be as detailed in the Notice Inviting Tender (NIT).
- 5. EARNEST MONEY DEPOSIT (EMD): The tender shall be accompanied by earnest money as per details in Notice Inviting Tender (NIT). No interest will be paid on the EMD. Tenders without Earnest Money shall be liable for rejection. However, MSMEs are exempted from paying Tender fee, EMDs as per MSME Act 2012. For getting the benefits in case of MSE firms, contractors / agencies should submit exemption certificate issued from the relevant authorities. No other exemptions are permitted for MSMEs.
- 6. The tender documents are not eligible to be transferred. The tenderer shall not mutilate or alter or over write or misuse in any manner and shall submit the same duly filled & signed in prescribed format only. However a photocopy can be retained for tenderer's reference. The successful tenderer will be issued with a copy of the tender document at the time of signing of the agreement.

The duly filled & signed tenders in sealed packet super-scribing "Tender for Electrical works for Canara Bank's alternate leased branch Premises at Krave Road, Pune 15332)" are to be submitted to the office of Divisional Manager/ Assistant General Manager ( GA section) at the address mentioned above. The date of opening of sealed tenders shall be as detailed in the Notice Inviting Tender (NIT) in the presence of the office staff and contractors/ representatives of contractors who are present at the time of opening of tender.

- 7. The tenderer shall check the tender documents and if any page/pages is/are missing or duplicate or indistinct, the same shall be brought to the notice of employer and rectified before submission of the tender.
- 8. The total time allowed for carrying out of the work shall not exceed the period specified in the NIT counted from the day of Acceptance Letter and/ or written orders to commence the work by the Bank.
- 9. The contractors should quote in figures as well as in words the rate, and amount tendered by them without any conditions. The amount for each item should be worked out and the requisite totals given. The rates quoted shall be all inclusive rates for the item of work described, including materials, labour, tools & plant, carriage & transport, supervision, overheads & profits, mobilizing and other charges whatsoever including any anticipated or un-anticipated difficulties, inclusive of all taxes and duties, etc complete including Goods and Service Tax (GST) of the materials for proper execution of the work as per drawings and specifications and no claim whatsoever for any extra payment shall be entertained. The quoted rates should be readable without any over-writing. The Goods Service Tax (GST) on the finished items as per actual will be payable extra by the Bank.
- 10. The language for tender shall be ENGLISH and the total amount tendered should be written in the same language only.
- 11. The security deposit shall be collected and repayable as detailed in clause No.12 of the General Conditions of the Contract.
- 12. The successful tenderer to whom the contract is awarded will have to deposit as initial security deposit a further sum to make up 2% of the value of accepted tender including the Earnest Money as detailed in clause No. 12 of the General Conditions of the Contract. The EMD of the contractor whose tender is accepted, shall be forfeited in full in case he does not remit the Initial Security Deposit within the stipulated period or start the work by the stipulated date mentioned in the work order.
- 13. The acceptance of a tender will rest with the employer which does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all of the tenders received without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected. THE EMPLOYER RESERVES THE RIGHT TO ACCEPT THE TENDER IN FULL OR IN PART AND THE TENDERER SHALL HAVE NO CLAIM FOR REVISION OF RATES/ OTHER CONDITIONS IF HIS TENDER IS ACCEPTED IN PART.
- 14. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.
- 15. All rates shall be quoted on the proper form of the tender alone. Quoted rates and units different from prescribed in the tender schedule will be liable for rejection.

- 16. Special care should be taken to write the rates in figures as well as in words. While quoting the rate in schedule of quantities, the word `only' should be written closely following the amount and it should not be written in the next line. However, if any discrepancy is found,
  - i) The rates which correspond with the amount worked out by the tenderer shall unless otherwise proved be taken as correct.

(OR)

ii) If the amount of an item is not worked out by the tenderer or it does not correspond with the rates written either in figures or in words then the rate quoted by the tenderer in words shall be taken as correct.

(OR)

- iii) Where the rates quoted by the tenderer in figures and in words tally but the amount is not worked out correctly, the rates quoted by the tenderer will unless otherwise proved be taken as correct and not the amount.
- **17.** Tender is called as item rate and the tender containing percentage below/ above will be summarily rejected. However, where a tenderer voluntarily offers a rebate for payment within a stipulated period, this may be considered.
- 18. GST, or any other tax, on material in respect of this contract shall be payable by the tenderer and the Employer will not entertain any claim whatsoever in respect of the same, and nothing extra shall be paid/ reimbursed for the same subsequently. The applicable Goods and Service Tax (GST) will be payable extra by the Bankon the final bill amount.
- **19.** The contractor shall give a list of his relatives, if any, working with the Employer along with their designations and addresses.
- 20. No employee of the employer is allowed to work as a contractor for a period of two years of his/her retirement from the employer services, without the previous permission of the employer. This contract is liable to be canceled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the employer as aforesaid before submission of the tender or engagement in the contractor's service.
- 21. The tender for the works shall remain open for acceptance for a period of 90 days from the date of opening of tenders. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to the Employer, then the Employer shall, without prejudice to any other right or remedy, be at liberty to forfeit full value of the earnest money as aforesaid. (Also please refer special conditions regarding validity of optional items).
- 22. The tender for the work shall not be witnessed by a contractor or contractors who himself / themselves has / have tendered or who may and had/have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summary rejection.

- 23. It will be obligatory on the part of the tenderer to tender and sign the tendered documents for all the component parts and that, after the work is awarded, he / they will have to enter into an agreement (as enclosed) for each component with the competent authority of the Employer.
- **24.** Further the tenderer shall agree that until a formal agreement on stamp paper is prepared and signed, this tender shall constitute a binding contract between the tenderer and the Employer.
- **25.** The tenderer, apart from being a competent contractor must associate himself with agencies of appropriate class who are eligible to tender for other related works connected directly or indirectly with the contract and employed by the employer.
- **26.** Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and dimensions, the means of access to the site, and obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender.
- 27. Tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the work.
- **28.** On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Employer shall be communicated to the Employer.
- 29. Method of Evaluation of tender: All the competitive tenders will be received on the specified date and time. On the same day or on specified date & time in event of any compelling circumstances, the tenders will be opened in the presence of the available tenderer. Any clarifications, discrepancies, omissions, ambiguities in the tender document or any doubt as to their meaning should be reported during the pre-bid meeting.
- **30.** In case of other un-successful tenderers, the EMD shall be returned. No interest is payable on EMD.

| <b>31.</b> The successful tenderer/contractor, on acceptance of his tender by the Acceptin Authority, shall, within 7 days from the date of acceptance, sign on a stamp paper, th contract consisting of -             |
|--|
| (a) Standard form of Agreement on stamp paper.   |
| (b) Notice inviting tender, all documents including tender drawings, if any, forming th<br>tender as issued at the time of invitation of tender and tender acceptance with an<br>other correspondence leading thereto. |
| (c) Price Bid / Schedule Bill of Quantities.   |
| 32. The tenderer/contractor, should be accesses of Income Tax, Goods and Service Tax etc.  |
| For & on behalf of the Employer  |
|  |
| Signature of the Contractor/Tenderer   |
| with Name, Constitution & Seal   |
|  |
| Signature of the Authorised/ Accepting Authority   |
|  |

#### (II) TENDER-OFFER

I/We have read and examined the Notice Inviting Tender, Schedules, Specifications Applicable, Drawings and Designs, General Rules and Instructions, General Conditions of Contract, Special conditions, Schedule (Bill) of quantities in Price Bid, and all other documents referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Employer within the time specified at the rates specified in the attached Price Bid viz., schedule of quantities and in accordance in all respects with the specifications, designs drawings and instructions in writing referred to in the General Rules and Instructions, General Conditions of Contract and in all respects in accordance with, such conditions so far as applicable.

| I/We agree to keep the tender open for 90 days from the due date of submis | sion thereof and |
|--|------------------|
| not to make any modifications in its terms and conditions. A sum of `      | is hereby        |
| forwarded as earnest money in form of Demand Draft of (N                   | Name of the      |
| issuing Schedule Bank) bearing no and date and                             |                  |

In the event of my/ our failure to commence the work on the specified date after award I/ We agree that the Bank shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely otherwise the said earnest money shall be retained by it towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein.

I/ We agree that should I/ We fail to deposit the full amount of initial security deposit and/ or fail to commence the work specified in the above memorandum, an amount equal to the amount of the earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the Employer and the same may at the option of the Employer be recovered without prejudice to any other right or remedy available in law, out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/ us under this contract or otherwise.

I/ We hereby declare that I/ We treat the tender documents, drawings and other records connected with the work as confidential documents and shall not communicate information/ derived there from to any persons other than a person to whom I/ We am/ are authorized to communicate the same or use the information in any manner prejudiced to the safety of the Employer.

| receive. Shri, Partner/ Proprietor/ Authorized representative  |
|--|
| of the Company, is the person authorized to negotiate commercial, technical terms & conditions & sign on behalf of the firm any Agreement, Bills & receipts for this work.       |
| I/We agree that until a formal agreement on stamp paper is prepared and signed, this tender with your written acceptance thereof shall constitute a binding contract between us. |
| Date: / /2024  |
|  |
| Signature of the Contractor / Tenderer   |
|  |
| Witness, Name & address:   |
| (Full Postal Address including Pin Code No. & Telephone No.)   |
| 1).  |
|  |
| 2).  |
|  |

# (III) ACCEPTANCE

| The above tender (as modified by us or negotiations as provided in t<br>mentioned hereunder) is accepted by me for and on behalf of the Emplo |  |
|---|--|
| sum of ` (Rupees  |  |
|   |  |
| The letters referred to below shall also form part of this contract agreement:  |  |
| a)  |  |
| b)  |  |
| c)  |  |
| Dated thisday of the month of 2024  |  |
| For & on behalf of the Employer   |  |
| Signature:  |  |
| Designation:  |  |

#### (IV) FORM OF AGREEMENT

|  | de this                                     | day of t  | the month of  | in the ye                  | ar 2024                        |
|--|---|---|---|----------------------------|--------------------------------|
| BETWEEN, Canara                              |   |   |   |                            |                                |
| (Acquisition and Tra                         | -   |   |   | _                          |                                |
| Road, Bangalore - 5                          |   | •   |   |                            |                                |
| Manager its duly cor                         | •   |   | •   | •                          |                                |
| ONE  | PART;                                       | `   | and   |                            | Shri                           |
|  | •   |   |   | resident                   | of                             |
|  |   | sole  | propriet  | <br>tor                    | of                             |
| M/s  |   |   |   |                            |                                |
|  |   |   |   |                            |                                |
| the partnership firm<br>represented by its M | -   |   |   | aı                         |                                |
|  |   | ·   |   |                            |                                |
|  |   | ·   |   | under the pro              | ovisions                       |
| M/sof the Companies                          | Comp Act 1956 havi                          | pany/ body cor<br>ng its regist   | porate incorporated<br>ered office at the   | e following a              | address                        |
| M/s<br>of the Companies                      | Comp Act 1956 havii                         | pany/ body cor<br>ng its regist<br>_, duly rep<br>ited and                    | porate incorporated<br>ered office at the<br>resented at<br>authorized M            | e following a<br>anaging [ | address<br>_ duly<br>Director, |
| M/s<br>of the Companies<br>represented by    | Comp Act 1956 havin its constitut and (here | pany/ body cor<br>ng its regist<br>_, duly rep<br>ited and<br>einafter called | porate incorporated ered office at the oresented at authorized Mithe Tenderer whice | e following a<br>anaging [ | address<br>_ duly<br>Director, |

#### NOW THIS AGREEMENT WITNESSETH as follows:

- 1. In this agreement words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to.
- 2. The following documents not inconsistent with these presents shall be deemed to form and be read and construed as part of this agreement viz
  - a) Notice inviting Tender
  - b) General Rules and Instructions for the guidance of Tenderers.
  - c) The Tender, Letter of Acceptance, Letters from & to the tenderer, if any, leading to and prior to acceptance letter.
  - d) General Conditions of contract and clauses of contract along with Annexures thereto
  - e) Technical Specifications/ particulars, Special Conditions/ Instructions, tender drawings if any, etc.
  - f) Schedule of quantities including Prices and tendered amount known as Price-Bid.

| 3. In consideration of the payments to be made by the Employer to the tenderer, the tenderer hereby covenants and agrees with the Employer to construct, complete and perform the works in conformity in all respects and subject to all terms and conditions/ rules as mentioned in the General Conditions as also in the aforesaid documents which shall from part of this agreement. |               |              |            |               |  |  |  |  |
|---|---------------|--------------|------------|---------------|--|--|--|--|
| In witness whereof the parties hereto have here day and year first above written.   | eunto set the | eir respecti | ve hands a | and seals the |  |  |  |  |
| Signed, sealed and delivered by the said  | tenderer,     | to           | the        | <br>Employer  |  |  |  |  |
| in the presence of: Signature of the Contractor/Tenderer  | Signature     | of Authori   | sed renres | entative      |  |  |  |  |
| (with seal)   | -             |              |            | g Authority.  |  |  |  |  |
| Witness (Signature, Name & Address):  1).   |               |              |            |               |  |  |  |  |
| 2).   |               |              |            |               |  |  |  |  |

#### (V) 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 the Employer.

#### 1. DEFINITIONS/INTERPRETATIONS

- The `Contract' means the documents forming the tender and acceptance thereof and the agreement duly executed between the Employer and the Tenderer, together with the documents referred to therein including those conditions, the specifications, schedule of quantities, tender agreement, designs, drawings and instructions issued from time to time by the Engineer/ Architect. All these documents taken together shall be deemed to form one contract and shall be complementary to one another.
- II) In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them
  - a) The `Tenderer' or `Supplier' or `Contractor' shall mean the individual Karta, or Manager of HUF, firm or Company, whether incorporated or not, undertaking the works and shall include the legal heirs/ representatives of such individual or the partners composing firm and theirs legal heirs and successors, or company's authorised and constituted attorneys/ agents and permitted assignees of such firm or company.
  - b) The 'Employer' or 'Bank' means any officer of the Canara Bank, who is specifically authorised to enter into contracts in respect of the above works.
  - c) The `Engineer-in-Charge' or 'Bank Engineer' or 'Engineer' means the Senior Manager/Manager, or Officer/ Engineer and/ or Site Engineer who shall supervise and be in-charge of the work or any other authorized representative or person specifically deputed by the Employer wherever they are employed from time to time by the Employer.
  - d) 'Contract Price' shall mean the final accepted rates in Price Bid hereto.
  - e) 'Date of Contract' means the Calendar date on which the Employer and Contractor have signed the Agreement on the stamp Paper.
  - f) "Accepting Authority" shall mean The Divisional Manager/Assistant General Manager of the Canara Bank (the Employer).

- g) 'Approval' wherever used in the specifications or schedule of Quantities shall mean, respectively, approved by or approval of the 'Accepting Authority' in writing.
- h) 'Appellate Authority' shall mean The Deputy General Manager, of the Bank (the Employer) who shall also be the authority to consider any extension of time or compensation as defined in clause hereunder.
- 'Notice in writing' or 'written notice' shall mean a notice in writing typed or printed characters delivered to or sent by registered post to the last known address private or business address or registered office address, and shall be deemed to have been received when in ordinary course of post it would have been delivered, and/ or delivered personally, or otherwise proved to have been received.
- 'Virtual completion' shall mean that the work/ installation is complete in all respects in the opinion of the Employer & for which the completion/ clearance certificate has been issued by the Engineer and the installation is fit for usage.
- k) 'Drawings' shall mean all drawings and/ or design drawings furnished by the tenderer/ sketches duly signed by the authorized Engineer/ Architect on behalf of the Employer before commencement or during the progress of the work.
- 'Letter of Acceptance' shall mean an intimation by a letter issued by the Accepting Authority of the Employer to tenderers that his tender has been accepted in accordance with the provisions in the said letter.
- m) "Defect Liability Period" shall mean a period of twelve months from the certified date of virtual completion issued by the Engineer/ Architect and accepted by the Employer, However in cases where completion gets delayed abnormally due to unavoidable reason(s) defect liability period shall be reckoned 12 months from the date of completion or 18 months from the date of start of work which ever is earlier.
- n) "Architect " shall mean Architect/ Architectural Consultant appointed by the Bank for the Project.

#### 2. SCOPE OF WORKS TO BE CARRIED OUT

- 2.1 The work consists of supply and installation of readymade (factory made) storage units as described in the Bill of Quantities based on technical specifications furnished. The contractor shall be responsible for its functioning according to the design criteria and its parameters. Not withstanding the details furnished, any discrepancies shall be brought out in the technical bid highlighting the shortcomings and suggest modifications.
- 2.2 The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works.
- 2.3 The descriptions given in the Schedule/ Bill of Quantities shall, unless otherwise stated, be held to include wastage on material, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary and for the full and entire execution and completion as aforesaid in accordance with good engineering practice and recognized principles.
- 2.4 The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawing being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
- 2.5 In the case of discrepancy between Schedule of quantities, Specifications and/ or the Drawings, the following order of preference be observed -

| a) Description in Schedule/ Bill of Quantities | b) Technical Specifications |
|--|-----------------------------|
| c) Drawings, if any, prepared for the design   | d) BIS Specifications       |

- 2.6 If there are varying or conflicting provisions made in any one or more document(s) forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on contractor.
- 2.7 Any error in description or quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the Contract.
- 2.8 The contractor shall forthwith comply with and duly execute any work comprised in such Employer's instruction, provided always that verbal instructions, directions and explanations given to the contractor's or his representative upon the works by the Employer shall, if involving a variation be confirmed in writing to the contractor's within 3 days.

- 2.8.1 No work for which rates are not specifically mentioned in the priced schedule of quantities shall be taken up without written permission of the Employer. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the Employer as provided in clause "Variation".
- 2.8.2 Regarding all factory made products, they shall be manufactured as per their respective IS code updated and all test undertaken at factory.

#### 3. SITE VISIT

Intending tenderer shall visit the site and make himself thoroughly acquainted with the local site conditions, nature and requirements of works, facilities of transport condition, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in his tender cost of carriage, freight and other charges as also for any special difficulties and including *local authorities*/ police restriction for transport etc. for proper execution of work as indicated. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Employer might be deemed to have reasonably been inferred to be so existing before commencement of work.

#### 4. TENDERS

- 4.1 The entire set of tender paper issued to the tenderer should be submitted fully priced and also signed on the last page of respective chapter (this shall be acceptance of all the pages of the tender and its stipulations) together with initials on every page. Notwithstanding this, Initials/ signature in every page will indicate the acceptance of the tender papers by the tenderer.
- 4.2 No modifications, writing or corrections can be made in the tender papers by the tenderer, but he may at his option offer his comments or modifications in a separate sheet of paper attached to original tender papers.
- 4.3 The Tenderers should note that the tender is strictly on item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable & self-supporting. If called upon by the Employer, detailed analysis of any or all the rates shall be submitted. The Employer shall not be bound to recognize the contractor's analysis.
- 4.4 The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract.
- 4.5 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 contracts, the payment of such 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.
- 4.6 The Employer has power to add to, omit from any work as shown in the drawings or described in the specifications or included 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.
- 4.7 The Tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

#### 5. SIGNING OF CONTRACT & AGREEMENT

- 5.1 The successful tenderer/ contractor, on acceptance of his tender by the Accepting Authority, shall, within 14 days from the stipulated date of start of the work sign the contract consisting of
  - a) Standard form of agreement on stamp paper, the notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
  - b) Standard Tender Form consisting of
    - i) NIT & General Rules and Instructions.
    - ii) General Conditions of contract and clauses of contract along with Annexure thereto, like specification, special conditions etc.
    - iii) Bill of Quantity and Price Bid.
- 5.2 The contractor shall pay for all stamps and legal expenses, incidental there to.

#### 6. PERMITS AND LICENSES

- 6.1 Permits and licenses for the release of materials or its purchases, which are under Government control, will be arranged by the contractor. It may be clearly understood that no compensation or additional charges can be claimed by the contractor for non-availability of such materials in due time on this account or according to his own requirements.
- 6.2 The contractor may, however, be eligible to a proportionate extension of time on this account, which in the opinion of the Employer is reasonable.

#### 7. GOVERNMENT AND LOCAL RULES

The contractor shall conform to the provisions of all local byelaws and acts relating to the work and to the regulations etc. of the Government and Local Authorities and shall note to obtain the necessary permissions in this regard. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities and shall indemnify the Employer against such liabilities and shall defend all actions arising from such claims or liabilities.

#### 8. TAXES AND DUTIES

The tendered cost must include GST on the materials, all duties royalties, cess and sales tax or any other taxes or local chargesif applicable. No extra claim will be entertained with exception herein specified.

- 8.1 The Tenderers must include in their tendered cost must include GST on materials, or any other taxes if applicable. No extra claim on this account will in any case be entertained. However, pursuant to the Constitution (Forty Sixth Amendment) Act, 1982, if any further is imposed by Statute, and any Central Excise Duty by the Central Government on the principal constituent materials after the date of receipt of tenders, and the contractor there upon necessarily and properly pays such taxes/ levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Employer (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor. On account of any downward revision of such taxes/ levies, the benefit shall be passed on to the Employer and shall be binding on the contractor even without the claim by the Employer. However, the Goods and service tax (GST) will be payable extra by the Bankon the final bill amount.
- 8.2 The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and/ or the Engineer/ Architect and further shall furnish such other information/ document as the Employer may require from time to time.
- 8.3 The contractor shall, within a period of 30 days of the imposition of any such further tax/ levies, described above, give a written notice to the Employer that the same is given to pursuant to this condition, together with all necessary information relating thereto.

#### 9. OPTIONAL ITEMS

All Optional items described in the schedule of quantities shall be separately included in the contract price as described in the schedule of quantities including all cost and profits but not

totaled in the final value. These items shall be exercisable by the Employer any time during the course of execution of work and shall be binding on the contractor similar to the other items furnished in the tender.

#### 10. QUANTITY OF WORK TO BE EXECUTED

The quantities shown in the schedule of quantities are intended to cover the entire works as per the drawings/ specifications/ scope of work, and therefore the contractor is bound to complete the works at the same quoted rates in the event of quantity exceeding the specified bill of quantity, but the Employer reserves the right to execute only a part or the whole or any excess.

#### 11. OTHER PERSONS OR AGENCIES ENGAGED BY THE EMPLOYER

The Employer reserves the right to execute any part of the work included in this contract by other agency or persons and contractor shall allow reasonable facilities and use of his facilities for the execution of such work. The main contractor shall extend all co-operation in this regard.

Wherever the work is proposed in co-ordination with other agencies, the contractor shall cooperate with the schedule of works in such a manner as worked out by the Bank Engineer.

# 12. EARNEST MONEY, INITIAL SECURITY DEPOSIT, RETENTION MONEY & TOTAL SECURITY DEPOSIT

- A) *Earnest Money Deposit:* The tenderer will have to deposit the specified amount of earnest money as detailed in the notice inviting tender at the time of submission of tender. No interest will be paid on the earnest money. The earnest money of unsuccessful tenderers will be refunded without any interest soon after the decision to award the work is taken or after the expiry of the validity period of the tender.
- B) *Initial Security Deposit:* The successful tenderer whose tender is accepted shall be required to furnish by way of Initial security a sum which shall be equal to 2% (two percent) of the accepted value of the tender including the Earnest Money Deposit, within 14 (fourteen) days of the date of issue of the letter of acceptance of his tender, Demand Draft payable to the Employer.
- C) Total Security Deposit & Retention Money: A further sum of 8% (eight percent) of the Gross value of each interim/ final bill shall be deducted as Retention money to make up, together with the Initial Security Deposit, a total Security Deposit equal to 5.0 % of the remaining amount of the accepted value of the tender. Retention money would be retained until the completion of Defects liability period and no interest would be paid on retention money kept with the Bank.

#### 12.1 Repayment of Retention Money (Total Security Deposit):

The retention money amount will be refunded 14 days (fourteen) days after the end of Defect Liability Period provided

- i) Contractor should remove all their materials, equipments, labour force, temporary sheds/ stores etc. from the site.
- ii) Contractor should have completed all the necessary testing, complied with the inspection remarks & its rectifications if any, submission of all the required particulars, test certificates and such other particulars.
- iii) Contractor has satisfactorily carried out all the works and attended to all defects in accordance with conditions of the contract. No interest is allowed on retention money. Alternatively, the above said security deposit shall be released after the completion of work provided the contractor submits bank guarantee for the amount for a period of defect liability period from any scheduled commercial Bank in the format acceptable to the Bank.

#### 13. FACILITIES TO BE PROVIDED BY THE CONTRACTOR

- i) The contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the design parameters, technical specifications, drawings and schedule of quantities. Based on the details furnished in the NIT, the contractors should undertake their own assessment and design the plant and system required. If the contractor finds any discrepancies, it should immediately be brought to the notice of the Employer.
- ii) The tenderer shall take full responsibility for adequacy, suitability and safety of all the design, works and methods of design/ installation.
- iii) The employer shall on no account be responsible for the expenses incurred by the contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangement etc. The employer shall not be responsible for the safety of the workers at site either on account of the works executed by the contractor or on account of the works executed by any other agency involved at that time.
- iv) The Employer on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already built and paid for by the Employer.
- v) The contractor shall at all times give access to workers employed by the Employer.
- vi) All tools, equipments and other required facilities for execution of work shall be provided by the contractor.
- vii) Any facilities available at site shall be utilised only with prior permission of the Employer or Building society or the in-charge of the site/ building owner and cannot be

taken as granted and for such services and utilities, the Employer is entitled to charge at his discretion.

- viii) Electricity required for the works can be tapped from one common point.
- ix) Contractor shall provide and maintain all measuring instruments, including steel tape at all time for properly carrying out the work and for the use of the employer including employing skilled attendants and site engineer at site.
- x) No extra charges shall be paid over and above what has been quoted for any of the above or for similar such services.

#### 14. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART

#### i) Time of Completion

The entire work is to be completed in all respects within the stipulated period. The work shall be deemed to commence immediately from the date of acceptance letter or date of handing over site whichever is earlier. Time is the essence of the contract and shall be strictly observed by the contractor.

The work shall not be considered as complete until the Employer certifies in writing that the work has been virtually completed and defect liability period shall commence from the date of such certificate.

#### ii) Extension of Time

- (a) The time allowed for execution of the Works by the Contractor as specified or the extended time in accordance with these conditions shall be the essence of the Contract. If the contractor commits default in the execution of the work as aforesaid, the Employer shall without prejudice to any other right or remedy available in law be at liberty to forfeit the earnest money absolutely.
- (b) Request for extension of time, to be eligible for consideration, shall be made by the contractor to the accepting authority in writing within <u>Ten days</u> of the happening of the event causing delay. The contractor shall also, if practicable, indicate in such a request the total period for which extension is desired, overlapping period, if any, with earlier events causing delays.
- (c) The decision of the Employer for an extension of time for completion hereunder (which decision shall be final and binding on the contractor) shall be promulgated on completion of the work or at the conclusion of such events based on which the extension of time was sought by the contractor, and the Employer shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause with respect to payment of Liquidated Damages shall, in such case, be read and construed as

if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

#### iii) Progress of Work

During the period of work, the contractor shall maintain proportionate progress on the basis of a programme chart submitted by the contractor and approved by the Employer. Contractor shall plan for procurement of materials, equipments well in advance and reflect the same in a progress chart so that there is no delay on the part of the contractor in completion of the project. Maintenance and production of such records as and when required shall be the responsibilities of the contractor.

#### 15. LIQUIDATED DAMAGES

15.1 If the contractor fails to maintain the required progress in terms of the contract or to complete the work and clear the site on or before the contract or approved extended date of completion, he shall, without prejudice to any other right or remedy of the Employer on account of such breach, pay as agreed compensation, the amount calculated at the rates stipulated below or such smaller amount as may be fixed by the employer on the contract value of the work for every completed week that the progress remains incomplete.

15.2 For this purpose the term 'Contract Value' shall be value of the contract as accepted.

- a) Completion period (as originally stipulated) not exceeding 6 months @ 1 percent per week
- b) For contracts exceeding 6 months but not exceeding 24 months as above @ 0.5 percent per week

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed the under noted percentage of the Contract Value.

- 1) Completion period (as originally stipulated) not exceeding 6 months 10 %
- 2) Completion Period 6 to 24 months 7.5 %
- 15.3 The Employer shall have the right to adjust, set-off against any sum payable to the contractor under this or any other contract with the Employer anywhere in India/ outside India.
- 16 TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE **REQUIREMENTS**

- The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any hoarding, gantry, building structure other than those approved by the Employer. No fixtures or materials to be placed in such a manner that can be considered dangerous to the installation and to the persons working or passing by or visiting the site or occupants.
- Storage of materials: The contractors shall make use of existing facilities with due permission of the Employer for storage of materials at site, but watch & ward arrangements for the safety of materials shall be the responsibility of the contractor.

#### 17. NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS

- 17.1 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 other Companies (Indian or International), and/ or Statutory Authorities, with whose system and design or technical know how are/were proposed to have connection with this work. So also the contractor shall before making any variations from the drawings or specification that may be associated to so conform, give the Employer written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer on receipt of such intimation shall give a decision within a reasonable time.
- 17.2 The contractor 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.
- 17.3 The contractor shall indemnify the Employer against all claims in respect of patent rights, royalties, damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Employer aloof and indemnified in all respects from such actions, cost and expenses.

#### 18. CLEARING SITE AND SETTING OUT WORKS

- 18.1 The site of work shown shall be cleared of all obstructions, waste materials, and rubbish of all kinds. All material damages on the place of work on the walls, ceiling or flooring or any other connected equipments, materials or installations shall be re-done to maintain the originality and leveled at the contractor's own cost.
- 18.2 The contractors shall set out the works and shall be responsible for the true and perfect setting out the works and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer.

#### 19. DISPOSAL OF DANGEROUS/ WASTE MATERIALS

All waste materials and other matters of any offensive nature shall be taken out once the works are completed. The contractor shall keep the works free from dangerous materials like industrial gases, welding machines and any such devices or material of toxic and poisonous nature shall not carry within the site or building any material that are explosive in nature. Any such offensive materials which are essentially required in course of work shall be undertaken with due written permission of the Employer provided such materials are permissible under Law.

#### 20. ACCESS

Any authorized representatives of the Employer shall at all reasonable times have free access to the works and/ or to the workshops, factories or other places where materials or equipments are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall extend necessary facilities to the Employer or their representatives for inspection, examination & testing of the quality & workmanship of the materials.

#### 21. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS

- 21.1 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 workmanlike 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 during the execution of the work, and to his entire satisfaction.
- 21.2 If required by the Employer the contractor shall have to carry out tests on materials and workmanship in approved material testing laboratories or as prescribed by the Employer at his own cost to prove that the materials etc. under test conform to relevant Bureau of Indian Standards and/ or as specified in the specifications. The necessary charges for sample material, transporting, testing etc. shall have to be borne by the contractor.
- 21.3 All material must be the best of their kind available and the contractors must be entirely responsible for the proper and efficient carrying out of the work. Samples of all the materials to be used must be submitted to the Employer when so directed by the Employer.
- 21.4 Should the work be suspended by any reason, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damages arising from any of these causes.

#### 22. REMOVAL OF IMPROPER WORK

- 22.1 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 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 drawings and specifications or instructions.
- 22.2 In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental hereto as certified by the Employer 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 that may be given by the employer, shall relive the contractor from his liability in respect of unsound work or bad materials or design.

#### 23. CONTRACTOR'S EMPLOYEES

23.1 The contractor shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the work and shall participate during site meetings and be available to take and comply with instructions of the Employer.

#### 23.2 No Child Labour

No labour below the age of eighteen years shall be employed on the work. In case of electrical works, the labour employed by the tenderer or their sub-contractor should be authorized person as permitted by the Chief Electrical Inspectorate office of the respective State Government. The Employer shall not be responsible for any deviation and the tenderers shall indemnify the Employer from any legal action or in any way directly or indirectly.

#### 23.3 Labour Legislation

The tenderer shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractors Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.

- 23.4 The tenderer shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- 23.5 The tenderer shall indemnify and keep indemnified the Employer against payments to be made under and for the observance of the laws aforesaid and the Contractors' Labour Regulations without prejudice to his right to claim indemnify from his sub-contractors. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

#### 23.6 COMPLIANCE OF LABOUR REGULATIONS

- i) The Tenderer shall at his own expense arrange for all the safety provisions for the safety of all workers and employees directly or indirectly employed on the work by the tenderer or his sub-contractors.
  - ii) The Tenderer shall be fully responsible for compliance at his own expense all the labour regulations and rules to be observed by him and his sub-contractors and by the Employer as Principal Employer of workers. The Tenderer shall fully indemnify the Employer against any action by the state and/ or Central Government for any default or alleged default by the Tenderer, Sub-contractor or Employer of any of such rules and regulations. If, due to any default of the tenderer or his sub-contractors, the Employer has to incur any expenditure for compliance of the rules and regulations or for any other reason connected with such default, the Employer shall be entitled to recover from the tenderer all such expenditure in full from any payment due to the tenderer.

#### 24. DISMISSAL OF WORKMEN

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

#### 25. 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, change in constitution and no subletting shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

#### 26. DAMAGE TO PERSONS, WORKMEN AND PROPERTY, INSURANCE

- 26.1 Damages to persons: The Tenderer shall be responsible for all injury/ damage caused to the work or workmen or to any 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 sub-contractors 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.
- 26.2 The clause shall be held to include interalia, any damages to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, footpaths 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.

- 26.3 The tenderer shall indemnify the employer and hold harmless in respect of all and any expenses arising from such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.
- 26.4 Damages to property: The Tenderer shall reinstate all damage on 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 or third parties.
- 26.5 The tenderer shall effect the insurance necessary and indemnify the employer entirely from all responsibility in this respect. The insurance must be placed with a company approved by the employer and must be effected jointly in the name of the contractor and the employer and the policy lodged with the latter. The scope of insurance is to include loss or damage to the work and workmen due to carelessness, accident including fire, earthquake, floods, etc., damage or loss to the contract itself till this is made over a complete state. Insurance is compulsory and must be effected from the very initial stage. The contractor shall also be responsible for anything which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this contract.
- 26.6 The employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or occurring from or in respect of any such claim or damages from any sums due or to become due to the contractor.
- 26.7 If the tenderer or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electrical cables or telephone post or wires, trees, grass or grass land, or cultivated ground contiguous to the premises on which the work or any part is being executed, or to any property of the residents if any damage shall happen to the work or property while in progress, from any cause whatever or if any defect, or other faults appear in the work within twelve months after a certificate final or otherwise or its virtual completion shall have been given by the Employer as aforesaid arising out of defect or improper materials or workmanship the tenderer shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Employer/ Engineer/ Architect cause the same to be made good by other workmen and deduct the expense from any sums that may be then or at any time thereafter may become due to the tenderer, or from his security deposit, or the proceeds of sale thereof or of a sufficient portion thereof.

#### 26.8 INSURANCE:

The Contractor shall, at his own expense insure the works, effect and maintain till

the completion of the contract a **Contractors All Risks Policy** (**CAR**) for Insurance, with an insurance company approved by the Employer, for the full amount of the contract .The scope of the cover shall include fire, lightning, explosion, crashing, aircraft, extinguishing water or other fighting measures, flood, inundation, rain, windstorm of any kind, earthquake, subsidence, landslide, rockslide, bad workmanship, lack of skill, negligence, malicious acts or human error, additional cover for third party liability and surrounding properties. The CAR shall be held in the joint names of the Employer and the Contractor (the name of the former being placed first in the policy.) with Employer as beneficiary against all risk as per the standard all risk policy for Contractors and deposit such policy or policies with the Employer with 21 (twenty days) days from the date of issuing the work order.

The Contractor shall also indemnify the Employer against all claims which may be made upon the Employer, whether under the Workmen's Compensation Act or any other statue in force, during the currency of this contract or at Common Law in respect of any employee of the Contractor or of sub-Contractor and shall be at his own expense obtain, effect and maintain until the completion of the Contract a policy of Insurance against such risk in respect of employees of contractor or sub-contractor with an Insurance Company approved by the Employer, a comprehensive policy of Insurance and deposit such policy or policies with the Employer from time to time during the currency of this contract.

In default of the Contractor insuring as provided above, the Employer on his behalf may so insure and may deduct the premiums paid from any money due, or which may become due to the contractor.

The Contractor shall upon settlement by the Insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the Insurer in respect of such damage shall be paid to the Contractor and the Contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.

The Contractor, in case of re-building or reinstatement after damage shall be entitled to such extension of time for completion as the Architect may deem fit, but shall, however, not be entitled to reimbursement by the Employer of any shortfall or deficiency in the amount paid by the insurer in settlement of any claim arising as set out herein.

Without prejudice to his liability under this clause, the Contractor shall also cause all sub-Contractors to effect for their respective portions of the works, similar policies of insurance in accordance with the provisions of this clause and shall produce or cause to produce to the Employer such policies. The Contractor shall not permit a sub-Contractor to commence work at the site unless the said insurance policies are submitted. In the event of failure of the sub-contractor to commence work at the site, the contractor shall be responsible for any claim or damage attributable to the said sub-Contractor.

#### 27. ACCOUNTS RECEIPTS & VOUCHERS

The contractor shall, upon the request of the Employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the contractor shall use materials less than what is required under the contract, the value of the difference in the quantity of the materials that was required to use and that actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

#### 28. MEASUREMENT

28.1 All measurements shall be carried out as per relevant IS code unless otherwise stated elsewhere in this document. Before taking any measurement of any work the contractor shall give reasonable notice to the Bank Engineer/ Architect and measurements particularly concealed measurements shall be jointly taken and recorded and such statement of measurement shall be enclosed along with the bill or running bills. In the event of such measurement taken directly by the contractor, the details shall be recorded and routes be marked for inspection of the bank Engineer/ Architect.

The measurements are to be recorded in a measurement book, maintained up to date at the site. The measurements should be recorded/ submitted in IS units only unless otherwise specified by the Engineer/ Architect.

28.2 Any deviation or discrepancies observed by the Engineer/ Architect shall be brought to the notice of the contractor or their representatives and during such inspection and measurement if the contractor fails to be present the certification of the Engineer/ Architect shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

#### 29. PAYMENT TERMS, ADVANCE PAYMENT & ITS RECOVERY

#### 29.1 Payment Terms

- i) Initial Mobilization Advance: No mobilization advance will be considered by Bank.
- ii) All bills shall be prepared by the contractor in the form agreed or furnished by the Employer. Normally "No payment" shall be made for a work, estimated to cost Rs. 2.00 lakhs or less but for the final bill after the whole of the work has been completed and certificate of completion recorded.

iii) The contractor shall submit interim bills only after taking actual measurements jointly recorded with the Engineer-In-Charge/ Employer/ Architect at site in Measurement Books. The bills shall be submitted in the following proforma.

| As per Tender |                     |     |      |        | Previous Bill |        | Current Bill |        | Up to Date Bill |        |
|---------------|---------------------|-----|------|--------|---------------|--------|--------------|--------|-----------------|--------|
| Tender item   | Item<br>Description | Qty | Rate | Amount | Qty           | Amount | Qty          | Amount | Qty             | Amount |

- iv) All such interim payments accepted by the Contractor shall be regarded as payments by way of advances against final payment only. These shall not preclude bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected.
- 29.2 Any certificate given by the Engineer-in-charge/ Architect relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications.
- 29.3 Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the engineer-in-charge/ employer under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.
- 29.4 Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided.
- 29.5 All the payments, interim or otherwise, are subject to statutory deductions of Income Tax & its Surcharge, VAT deductions as notified by respective Local/ State Government/Authority and any such instructions conveyed from time to time. From the interim bills, the retention money as detailed elsewhere in this tender shall also be deducted.
- 29.6 The final bill shall be submitted by the contractor within 1 (one) month from the date of completion of work or from the date of certification of virtual completion certified by the Engineer-in- charge/ Architect.

#### 29.7 FINAL PAYMENT

- 1) The Tenderer shall submit the final bill in the same manner as specified in interim bills within one month of physical completion of the work or within 15 days of the date of the final certificate of completion furnished by the engineer-in-charge whichever is earlier. No further claims shall be made by the tenderer after submission of the final bill or on acceptance of the final payment and these shall be deemed to have been waived and extinguished.
- (2) The final payment is subject to deduction of Total Security Deposit to be retained during the defect liability period as described in the condition of contract under clause 12.

#### 30. VARIATION/ DEVIATION

The Engineer-in-Charge with the specific approval of the Employer shall have power to make alteration in, omissions from, additions to or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and the tenderer shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge. Such alterations, omissions, additions or substitution shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the tenderer may be directed to do in the manner specified above as part of the works, shall be carried out by the tenderer on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided -

- (a) No work which radically changes the original nature of the contract shall be ordered by the Engineer-in-Charge as a deviation.
- (b) In the event of any deviation being ordered which in the opinion of the tenderer changes the original nature of the Contract, he shall within fifteen days of having been so ordered bring this to the notice of the Employer with the reasons but nevertheless carry it out and the disagreement as to the nature of work and the rate to be paid therefore shall be resolved in accordance with Clause under caption "SETTLEMENT OF DISPUTES AND ARBITRATION".
- (c). The tendered rates, shall hold good for any increase or decrease in the tendered quantities upto variation of 25% and as stipulated else here for legitimate completion of works as per original design or scope of work and on account of any modification or alteration suggested and where the variation is for the respective item is beyond 25%, the rate for the respective item may be reviewed on mutually agreed terms.

#### (d) ASCERTAINMENT OF PRICES FOR EXTRA/ SUBSTITUTE ITEMS

Should it be found that any variation is made, from the tendered schedule of item by operating additional item called "extra item" or "substitute Item' in substitution of some tendered items, the rate and the valuation thereof, unless previously or otherwise agreed upon, shall be made in accordance with the following rules -

- (i) Rates of extra or substituted items shall wherever possible be derived form the tender rates of similar Items in the contract. Whenever any rates are based on market rates of materials and labour, an element of profit and all overheads at fifteen percent.
- (ii) The Contractors submit their rate analysis in details, as detailed above (i), for variations/ extra items at least 15 days before executing the work to the bank engineer who shall scrutinize the analysis and forward the same for Bank's approval. The rates as corrected, verified, approved/ accepted by the bank shall only be final and binding on the contractor.

#### 31. SUBSTITUTION

In the event of non-availability of any specified material, should the contractor desire to substitute any materials and workmanship, he must obtain the approval of the Employer in writing for any such substitution well in advance. Such decision of the Employer shall be final and binding on the contractor. In respect of Materials whose makes are not specified in the tender, specific approval of the Employer has to be obtained in writing before their usage.

#### 32. PREPARATORY WORK FOR UTILISATION OF THE FACILITY AFTER COMPLETION

- 32.1 The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects set right. On completion of such inspection, the contractor shall inform the Employer that they have completed the work and it is ready for inspection.
- 32.2 On completion, the contractor shall clean all the area and its surroundings, equipments etc. and will leave the entire area clean and ready for immediate usage to the satisfaction of the Employer.

#### 33. CLEARING SITE ON COMPLETION

- 33.1 On completion of the works the contractor shall clear away and remove from the site all constructional materials, plant & equipments, tools, surplus materials, scraps, 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.
- 33.2 In the event of failure to clear the site as required the Employer have the right to undertake the same engaging other agency and the same shall be at the cost of the contractor and liable for deductions in the payments due to the contractor and the contractor shall not dispute such payments.

#### 34. DEFECTS AFTER COMPLETION

- 34.1 The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, or other faults, which may appear during the defect liability period.
- 34.2 In case of specialized work based on the contractors own design and their standard manufacturing product incorporated in the works and in the event of the design of the system being defective or any components used found to be defective on account of manufacturing defects or otherwise forcing, any improvement thereof to be implemented or undertaken to

rectify such inherent defects, notwithstanding additional cost of components or design modification, they shall be undertaken at contractor's own cost.

34.3 In default, the Employer may employ and pay other agency or persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto such expenses shall be made good and borne by the contractor failing which the same shall be recoverable from the payment due to the contractor and in the event of amount retained being insufficient, recover the balance from the contractor from the amount retained under clause no 12 together with any expenses the Employer may have incurred in connection therewith.

#### 35. CONCEALED WORKS

The contractor shall give notice to the Employer wherever any work is to be buried or concealed in the building in the earth, flooring, walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions or measurements taken before such burial. In default whereof the same shall, in the opinion of the Employer be either opened up for measurement at the contractors expenses or no payment may be made for such materials. Should any dispute or difference arise after the execution of any work as to measurements etc. or other matter which cannot be conveniently tested or checked, the notes/ certification of the Engineer-in-charge shall be accepted as correct and binding on the contractor.

#### 36. ESCALATION

The rate quoted shall be firm throughout the tenure of the contract (including extension of time, if any granted) and till the completion of work and will not be subject to any fluctuation due to increase in cost of materials, labour, sales tax, octroi etc. unless specifically provided in these documents.

#### 37. IDLE LABOUR

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

#### 38. SUSPENSION OF WORKS

- 38.1 Subject to other provisions contained, the Employer may without prejudice to his any other rights or remedy against the tenderer in respect of any delay in commencing, completing or during the progress of work or inferior workmanship, may serve notice in writing absolutely determine and cancel the contract in any of the following cases -
- i) If the contractor having been given by the Employer, a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un-workman like manner, the contractor fails comply with the requirement of such notice within a reasonable time as decided by the employer.
- ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
  - iii) If the contractor has without reasonable cause failed to commence the work or has suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Employer (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from Employer.
- iv) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-charge.
  - v) If the contractor persistently neglects to carry out his obligations under the contract and/r commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer.
- vi) If the contractor commits any acts mentioned in terms of tender hereof. And when the contractor has made himself liable for action under any of the cases aforesaid, the Employer shall have powers:
- a) To determine or rescind the contract of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence. Upon such determination or rescission, the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of Employer.
- b) In any such event the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereto or actually performed under this contract unless and until the Engineer- in-

charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified; Provided further that any of the recoveries to be made when the excess cost incurred by the Employer is more than the Security Deposit to be forfeited, such recoveries shall be limited to the amount by which the excess cost incurred exceeds the Security deposit so forfeited.

38.2 In any case in which any of the powers conferred upon the Employer hereof, shall have become exercisable & the same shall not be exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected.

#### 39. TERMINATION OF CONTRACT BY EMPLOYER

#### 39.1 If the contractor

(a) at any time makes default in proceeding with the works or any part of the work with due diligence and continues to do so after a notice in writing of 7 days from the Engineer -in-Charge;

or

(b) commits default in complying with any of the terms and conditions of the Contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge;

or

(c) fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice in writing is given to him in that behalf by the Engineer-in-Charge;

or

d) shall offer or give or agree to give to any person in Bank service or to any other person on his behalf any gift or consideration as an inducement or reward for favoring him in relation to the obtaining or execution of this or any other Contract for the Employer

or

e) shall enter into a Contract with the Bank in connection with which commission has been paid or agreed to be paid by him or with his knowledge, unless the particulars of any such omission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/ Engineer-in-Charge;

f) shall obtain a Contract with the Employer as a result of wrong tendering or other unethical methods of competitive tendering;

or

g) being an individual, or in a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose or amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors;

or

h) being a company, shall pass a resolution or the Court shall make an order for the winding up of the company or a receiver or manager on behalf of the debenture holders or others shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager;

or

 shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days;

or

- assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Accepting Authority;
- 39.1.2 The Accepting Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to the Employer, by a notice in writing cancel the contract as a whole or only such of items in default from the tenderer.
- 39.1.3 The Engineer-in-Charge shall on such cancellation by the accepting authority have powers to, for which the contractor shall hereby unconditionally agree -
  - (a) to take possession of the Site and any materials, constructional plant, implements, stores, etc., thereon; and/ or
  - (b) to carry out the incomplete work by any means at the risk and cost of the Tenderer.

- 39.2 On cancellation of the Contract in full or in part, the Engineer-in-Charge shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the Works or in case the Works or part of the Works is not to be completed, the loss or damage suffered by the Employer. In determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of contractor's materials taken over and incorporated in the work.
- 39.3 Any excess expenditure incurred or to be incurred by the Employer in completing the Works or part of the Work or the excess, loss or damages suffered or may be suffered by the Employer as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Employer in law be recovered from any money due to the Tenderer on any account, and if such moneys are not sufficient the Tenderer shall be called upon in writing and shall be liable to pay the same within 30 days.
- 39.4 If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge with the approval of the Employer shall have the right to sell any or all of the Contractor's unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the Contract and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the Contract.
- 39.5 Any sums in excess of the amounts due to the Employer and unsold materials, constructional plant, etc., shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Employer of the Works or part of the Works is less than the amount which the Contractor would have been paid had he completed the Works or part of the Works, such benefit shall not accrue to the Contractor.

## 40. SETTLEMENT OF DISPUTES AND ARBITRATION

- 40.1 It shall be an inseparable part of the contract that in matters regarding quality of materials, workmanship, removal or rejection of improper work, interpretation of the drawings and specifications, measurements of materials and/ or items of work, mode of procedure and carrying out of the work, the decision of the Engineer-in-Charge which shall be given in writing, shall be final, conclusive and binding on the tenderer.
- 40.2 (A) If the tenderer considers any work demanded of him to be outside the requirements of the contract, or considers any drawings record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of work, to be unacceptable, he shall promptly within 15 days request the Employer in writing written instruction or decision. Thereon, the Employer shall give his

written instructions or decision within a period of two months from the receipt of the tenderer's letter.

40.2 (B) Upon receipt of such written instructions or decision the tenderer shall promptly proceed without delay to comply with such instructions or decisions. If the Employer fails to give his instructions or decision in writing within a period of two months after being requested or if the tenderer is dissatisfied with the instructions or decision of the Employer, the Contractor may within 30 days appeal to the designated Appellant Authority of the Employer who shall afford an opportunity to the tenderer to be heard and to offer evidence in support of his appeal. If he is dissatisfied with this decision, the tenderer, shall within a period of thirty days from receipt of the Appellant Authority of the decision, indicate his intention to refer the dispute to Arbitration, failing which the said decision shall be final and conclusive and not referable to adjudication by the Arbitrator.

- 40.3 All disputes or differences in respect of which decisions have not been final, binding and conclusive as above shall be referred for adjudication by he arbitration by a Sole Arbitrator appointed as follows
  - a) Within one month of receipt of notice from any party to the contract for appointment of the Arbitrator the Appellant Authority, in charge of the work at the time of such appointment shall send to the tenderer a panel of three names of persons who shall not presently be connected with the work. The tenderer shall within fifteen days of receipt of this list select and communicate to the Appellant Authority the name of one person from the list who shall then be appointed as the sole arbitrator by the Appellant Authority.
  - b) If tenderer fails to communicate his selection of name, within the stipulated period, the Appellant Authority shall without delay select one person from the list and appoint him as Sole Arbitrator. If the Appellant Authority fails to send such a list within one month as stipulated, the tenderer shall send a similar list to the Appellant Authority within 15 days. The Appellant Authority shall then select one person from the list and appoint him as the Sole Arbitrator within 30 days of the receipt of the list. If the Appellant Authority fails to do so, the tenderer shall communicate to the Appellant Authority the name of one officer from the list, who shall then be the Sole Arbitrator.
  - c) 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 in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.
  - d) It is term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Appellant Authority of the appeal and a copy of his notice(s) of intention to refer the dispute to arbitration of such disputes as mentioned in Point 40.2 above failing which the notice

for appointment of the Arbitrator shall not be treated as notice for appointing the arbitrator.

- e) It is also a term of this contract that no person other than a person appointed by Appellant Authority, in charge of the work as aforesaid should act as arbitrator.
- f) It is also a term of the contract that if the tenderer does not make any demand for appointment of arbitration in respect of any claims in writing as aforesaid within 90 days of receiving the intimation from the Employer that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Employer shall be discharged and released of all liabilities under the contact in respect of these claims. No party shall be entitled to bring any claim to arbitration if the arbitrator has not been appointed before the expiry of sixty days after defect liability period.
- g) The arbitration shall be conducted in accordance with the provisions of the Indian Arbitration Act, 1996, 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.
- h) The arbitrator may from time to time with the consent of the parties enlarge the time for making and publishing the award.
- i) It is also a term of the contract that any fees, TA, DA and other charges are payable to the Arbitrator shall be paid by both the parties equally.
- j) The award of the Arbitrator shall be final and binding on both the parties

#### 41. RIGHT TO AUDIT/ TECHNICAL EXAMINATION

The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made even after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the tenderer under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the tenderer shall be liable to refund the amount of over-payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in clause 47 or in any other manner legally permissible and if it is found that the tenderer was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by the Employer to the tenderer, without any interest thereon;

Provided that the tenderer shall not be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand and the tenderer on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge.

## 42. PHOTOGRAPHS OF WORKS CARRIED OUT

The Contractor shall at his own cost supply a reasonable number of Post card size coloured photographs of the works carried out if and as per the instructions of the Bank Engineer. In the event of any dispute or termination of Contract either by the Employer or the Contractor, the Contractor shall arrange to obtain Photographs of the works completed up to the date of such termination of Contract.

#### 43. FORECLOSURE OF CONTRACT IN FULL OR IN PART

If at any time after acceptance of the tender, the Employer decides to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, they shall inform the Contractor in writing to that effect and the Contractor shall have no claim to any payment or compensation or otherwise whatsoever, on account of any loss of profit or advantage which he might have derived from the execution of the works in full, but which he did not derive in consequence of such foreclosure of the whole or part of the works.

The Contractor shall be paid at the contract rates for works executed at site.

## 44. REINSTATEMENT ITEMS

In case of items like making good new work and matching the finish with the existing one, the work will have to be done perfectly. In this case Employer's decision will be final regarding the acceptability of finish. If the reinstatement is not accepted by the Employer, the same will have to be done again to his satisfaction at no extra cost.

## 45. NON-AVAILABILITY OF ANY MATERIALS

If for some reasons, materials mentioned in the Approved Brand of Manufacturers or the Bill of Quantities are not available; the same shall be brought to the notice of the Employer in writing by the Contractor. No alternative material shall be used without Employer's written approval. Refer also clause 31 in this aspect.

## 46. LIEN

(a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the tenderer and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Employer pending finalisation or adjudication of any such claim.

- (b) Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withhold or retained by way of lien by the Employer or any other contracting person or persons through Engineer-in-Charge against any claim of the Employer or such person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or with such other person or persons.
- (c) It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the arbitrator (if the contracts governed by the arbitration clause) or by the competent court, as the case may be and that the tenderer will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the tenderer. For the purpose of this clause, where the tenderer is a partnership firm or a limited company, the Employer shall be entitled to withhold and also have alien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/ limited company as the case may be, whether in his individual capacity or otherwise.

#### 47. EXTERNAL INSPECTION & AUDIT

- (i) All works under or in course of execution or executed in pursuance of the Contract shall at all times be open and accessible to the inspection of the Quality Control Organisation of the Employer or any designated auditor/ officials of the Employer and of the Chief Technical Examiner's Office under Central Vigilance Commission.
- (ii) If it shall appear to the Engineer-in-Charge or to the Engineer in charge of Quality Control or any designated auditors/ officials of the Employer or to the Chief Technical Examiner, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the

work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand made in writing within the defect liability period from the Bank Engineer specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for earlier, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require and provide other proper and suitable materials or articles at his own charge and cost.

(iii) In the event of the contractor failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, the contractor shall be liable to pay compensation at the same rate as under the clause of defects after completion for this default.

iv) In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Employer or the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and without substantially affecting the utility of the item and the structure or he may reject the work outright without any payment and/ or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same & shall be final and binding on the tenderer.

## Signature of the Contractor/ Tenderer (With Seal)

I/We have read the tender document, its terms & conditions, aware of the scope of work, site conditions, specifications and the price-bid are quoted accordingly.

| Signature of the Contractor/Tenderer (with Seal) |
|--|
| Place:   |
| Date:  |

## (VI) GENERAL SPECIFICATIONS FOR SAFETY

The contractor shall provide shoring, necessary barriers, warning signals, and other safety measures while carrying out all the external work or wherever otherwise necessary to avoid accidents. He shall also provide and maintain at his cost all lighting & watching, fencing & security when and where necessary or as directed by Engineer or by the duly constituted authority for the protection of works and for the safety and convenience of public and others.

- 1 There shall be maintained in a readily accessible place first aid box including adequate supply of sterilized dressings and cotton wool.
- An injured person shall be taken to a hospital without loss of time whenever the situation requires. Address and telephone numbers of nearest physicians and hospital and also of police station shall be conspicuously displayed in the site office permanently.
- 3 Suitable and strong double scaffolds with adequate handrails and safety belts, helmets etc. shall be provided for all workmen, supervisors, and engineers for all works that cannot be done safely from ground. Unless permitted otherwise scaffolding shall be of steel with adequate lateral supports & bracing etc.
- 4 No portable single ladder shall be of more than 8 m length. The width between the side rails shall not be less than 30 cm and distance between two adjacent rungs shall not be more than 30 cm. Whenever a ladder is used, an extra labour shall be engaged in holding the ladder.
- Any excavated material shall not be placed within 2 m of the edge of the pit/ trench. All pits/ trenches shall be provided with necessary shoring, fencing, lighting etc.
- Workers engaged in mixing and handling materials such as cement mortar or concrete shall be provided with protective footwear and hand gloves.
- No floor, roof or other part of the structure shall be so overloaded with debris so as to render it unsafe.
- 8 Those engaged in welding works shall be provided with Welder's protective eye shields and gloves.
- 9 No paint containing lead or lead products shall be used except in the form of paste or readymade paint. Suitable facemasks shall be supplied to the workers while application of spray or scraping of such paint.
- 10 Contractor shall supply overcoats and other facilities to the painters and other workers.
- 11 Hoisting machines and tackle used in the works including their attachments, anchorage and supports shall be in perfect condition and they shall be checked/ serviced periodically and also before any major use.
- 12 The ropes used in hoisting or lowering material, as the means of suspension shall be of durable quality and adequate strength and free from any defects.
- 13 List of all the safety equipment with quantities shall be prominently displayed in the site office and updated regularly.

# (VII) SPECIAL CONDITIONS OF THE CONTRACT

- 1. The movement / carrying of materials etc are also suitably governed. Availability of lift or otherwise shall be got verified, if necessary the materials may have to be carried by staircase and all such constraints factors governing the building maintenance, security, working and transporting timings have to be ascertained and works are to be suitably planned. No extra cost will be payable on account of any re-fundable deposit or non-refundable payment to be effected to the society.
- 2. The works will have to be undertaken in a functioning office. Therefore, all required measures for smooth functioning of the office is to be planned. On day to day basis or as agreed upon, the waste, debris, packing materials on its unpacking etc are to be cleared from the site / building so that the functionality of the premises is not affected.
- 3. The contractor/ tenderer shall note that the above work is to be carried out in coordination with other contractors/ vendors such as Civil & Furnishing contractor, electrical contractor, air conditioning agency, fire detection & alarm systems agency.
- 4. In case of electrical works before doing any temporary disconnections etc, the contractor must inform the Bank officials in advance and then the connections shall be restored immediately on completion of works. The electrical contractor shall always provide and ensure that at the least one competent electrician is available throughout the work period even if there are no electrical works scheduled for the day, in particular at the beginning of the day well before commencement of the working hours so as to ensure availability of power and for any trouble shooting. No extra cost or separate claim for this said work shall be payable and shall be part of the responsibility of the contractor undertaking electrical works.
- 5. The rates quoted shall be inclusive of all taxes & duties payable by the contractor, as applicable to type of work undertaken. The contractor shall submit the details and proof of such payment of Goods and service tax (GST) pertaining to this work within 15 days of such payments made to the concerned authorities. Non submission of such details shall be liable to be treated as non-performance of contract during the defect liability period and retention money / security deposit is liable to be withheld for such period till submission of details, if necessary.
- 6. The contractor shall provide duly attested photographs of their personnel / workers to the Bank on their letter head in advance so as to enable the Bank to obtain the permission from the society and lodge the photographs with the security staff. Further in case the work is to be carried out overnight or on a Sunday / holiday, the contractor must inform the Bank one day in advance so as to make the necessary security arrangements etc.
- 7. Wherever detailed specifications are not given, the same shall be as per CPWDs specifications.

- 8. The contractor shall obtain approval from all statutory authorities such as Municipal Corporation, etc for the work to be executed. Liaisoning with Municipal authorities & other statutory authorities and obtaining approval/ permission for smooth execution and completion of the work is contractor's responsibility and no extra cost will be payable in this regard.
- 9. The tenderer shall note to seek required clarification before filling the price bid.
- 10. The tenderer shall note that the work is to be carried out in a working office and the work shall be carried out without affecting normal functioning of the office.
- 11. The work will be restricted to after office hours/ night hours and on holidays.
- 12. Please note that the 'ply' mentioned in the tender documents to be read as "marine plywood" which shall be as per IS 303 & the rates to be quoted accordingly.
- 13. The contractor shall obtain approval from all statutory authorities such as Municipal Corporation, etc for the work to be executed. Liaisoning with Municipal authorities & other statutory authorities and obtaining approval/permission for smooth execution and completion of the work is contractor's responsibility and no extra cost will be payable in this regard.
- 14. The contractor should take up all necessary precautions/ safety measures while executing the work at site.
- 15. The contractor should take necessary precautions so that the functioning of all offices at the subject building are no interfered/ hampered.
- 16. The contractor should take measures to avoid stacking up debris in common areas. Clearing/ cleaning of the premises while executing t the work is contractor's responsibility.

Signature of the Contractor/ Tenderer (With Seal)

## (IX) BILL OF QUANTITIES

The bill of quantities shall be read in conjunction with the drawings, Conditions of and Specifications as these documents are jointly explanatory and descriptive of the works included in the Contract.

General directions and descriptions of work and materials given elsewhere in the Contract documents are not necessarily repeated in the Bill of Quantities, reference is to be made to the other documents for information.

The Quantities of work and material in the Bill of Quantities are not to be considered as limiting or extending the scope of work to be done and materials to be supplied by the contractor. The quantities in the Bill of Quantities are an estimate of the amount of work but the work will be measured on complete and the contractor will be paid on the actual measurement of work approved by the Engineer.

Where price have been entered against Lump sum items, payment for such affected items shall be made in proportion to the extent of which at the time of billing, works have been done at the discretion of the Engineer.

'Providing and Fixing' / 'Providing and Laying' / Providing and Erecting' shall mean that the contractor has to provide such materials not being procured and borne by the Employer, but which are required for the item and if no material need be provided by the Contractor, the rate shall be on for fixing/ laying/ erecting of the component covered in the item.

The work also includes separating and stacking serviceable material anywhere in the compound as directed and lowering and carting away all unserviceable material debris from the site. The acronyms used in the Bill of Quantities.

| S.ft/ SQ. FT./ sqft | Square foot              |
|---------------------|--------------------------|
| r.ft                | Running foot             |
| Kg.                 | Kilogramme               |
| LS                  | Lumpsum                  |
| Nos./ No            | Numbers                  |
| Q.R.O.              | Quoted Rate Only         |
| Architect           | Architect/ Bank Engineer |
| t.w. / T.W./ b.t.c. | Teak wood/ Burma teak    |
| mtrs./ mtr./M/ m    | Meter                    |
| sqm/ sq.m           | square meter             |

#### **INSTRUCTIONS / Notes:**

- a) All materials should be confirming to relevant BIS codes.
- b) Tenderers to include all taxes including GST on the materials, duties, fees, transportation and all other expenses while quoting the item rates. The GST on the finishied item will be payable extra by the Bank.
- c) The dimensions shown in the layout plan are indicative and may vary as per site conditions. Tenderers to ensure that correct dimensions are obtained before supply/ installation of the modular furniture with approval from the Bank
- d) Tenderers to note that they have to supply & install the furniture as detailed in the Bill of Quantities in stages as and when area is made available, in coordination with other (electrical, civil and air conditioning) contractors
- e) Tenderer shall take up necessary safety measures while working at site for his/ other contractor manpower and equipments
- f) Tenderer shall present detailed Elevation/Design plan along with the tender. Any deviation shall also be mentioned in the tender document only
- g) The design might slightly vary as per requirement at the site {If only}, with approval from Bank.
- h) The contractor, at his own expense, shall visit the site and get acquainted with the working conditions before quoting their item rates.
- g) Delivery schedule of the material on site has to be informed at least 3 days prior to delivery to this office
- h) Any design element not possible to manufacture to be mentioned in detail in the bid itself and alternative for the same to be suggested as a deviation, if any.
- i) The colour scheme shall be as per the approval of the Bank

# SEAL & SIGNATURE OF THE CONTRACTOR DATE

## **TECHNICAL SPECIFICATIONS**

The Interior installation work shall confirm to the following I.S. Standards (latest additions), Local Supply Authorities Rules and Regulations and Fire Safety Norms.

- 1) IS: 732 Code of Practice for Interior wiring installation
- (System Voltage not exceeding 650V)
- 2) IS:1646 Code of Practice for fire safety of buildings
  - (General Interior Installation).
- 3) IS:9537,PART-II 1981 Rigid steel conduits for Interior wiring.
- 4) IS:2667 Fittings for rigid steel conduits for Interior fittings.
- 5) IS:2509 Rigid non-metallic conduits for Interior installations.
- 6) IS:1293 Pin Plugs and Sockets.
- 7) IS: 694 PVC insulated cables with copper conductors for voltages up to 1100 Volts.
- 8) IS:9532 Specification for conduits for Interior Installation
- 9) IS:3854 5A & 15A Switches
- 10) IS:3043 (1981) Earthing
  - 11) Indian Electricity Act, 1956 and Rules and Fire Insurance Regulations.

## **POINT WIRING:**

# a) METAL CONDUITS:

All conduit pipes shall confirm to IS 9537 PART-II 1981. Metal conduits shall be ERW black enameled 20mm/25mm as the case may be depending upon the number of wires permitted as table-1. The conduits shall be fixed to walls/ceiling with M.S. saddles and spacers at an interval of 1 meter and on either side of bends.

All conduit accessories shall be 16 gauge & bends shall be of inspection type. All bends, couplers, threaded portions etc. shall be painted with anti-corrosive paint. Bends in the pipes shall be done with bending hickies.

All pipes shall be cleaned for sharp burrs. Switch boxes shall be of G.I. 16G/14G. The switch boxes shall be concealed as per site requirement & as per Architect's/Consultant's Instructions.

Point shall be controlled with 5A switch or directly from DB as specified in schedule of quantities. Where plate type switches are not specified the switchboard shall have 3mm thick hylum sheet on which switches shall be mounted.

The wiring shall be carried out with multi stranded PVC insulated copper wires of 2.5 sq. mm. 2nos (Phase & Neutral) & 1.5 sqmm(Earth) . In all cases the earth shall be of green colour and neutral shall be black colour. All wires used shall be of 660 V grade. The point wiring shall be inclusive of circuit wiring from Distribution Board to the switchboard unless otherwise stated in schedule of quantities. The circuit wiring shall be with 3 nos. of 2.5 sq. mm PVC insulated multi stranded copper conductors color coded as detailed above. The rate shall also be inclusive of any chasing as directed by the Architects/Bank's Engineer to conceal the drops and finishing the same.

In case of group control directly from Distribution Board, the primary point shall be from D.B. to the first point and secondary point from first point to the next point looped. The point shall terminate into the 3 plate-ceiling rose.

# b) PVC CONDUITS:

The PVC Conduits shall confirm to latest IS standards and shall be of medium gauge. The conduits shall be joined with PVC adhesive at Joints. The Conduits shall be fixed to walls/ceilings with GI, spaces and Saddles at an interval of 60 cms & on either side of bends. The number of wires drawn in the conduits shall be as per table 1. The point wiring shall be controlled as in (a) above. The wiring shall be done with 2nos. of 2.5 sq. mm (Phase & Neutral)& 1.5 sqmm (earth) PVC insulated, copper conductors, multi stranded and color coded with red as phase, green as earth and black/ blue as neutral.

The circuit wiring shall be with 3 nos. of 2.5 sq. mm PVC insulated, copper conductors, multi stranded from distribution board to switchboard and the rate shall be included in the point wiring unless otherwise stated in the schedule of quantities. All other details shall be as for metal conduits.

## C) CASING CAPPING/ TRUNK AND TRUNKLING:

PVC casing shall be fixed, wooden partitions by means of screws spaced not more than 60 cms apart. Holes for fixing the PVC capping shall be done by drilling machine only and these holes shall be plugged with PVC plugs or grips to which the screws shall be fastened. No less than 1inch PVCcasing shall be used. All bends, tees, joints etc. shall be done in workman like manner with standard accessories. The number of wires in PVC casing capping shall be limited to a fill factor of not more than 60%. The point shall be controlled by 5 Amp switch. The switchboards shall either be flush mounted with partitions or surface mounted or concealed mounted as per site requirements and as directed. The wiring shall be carried out as described in (a) and (b) above.

This wiring shall not be done for concealed wiring & wiring over the false ceiling work.

## A-02. DISTRIBUTION BOARDS:

These shall be of sheet metal and of standard design with copper bus bars. The board shall be fixed at accessible heights. The boards shall be solidly fixed to walls/partitions, concealed or open as directed. All connections inside the distribution board shall be neatly arranged and tied with PVC strings. The MCB's shall be of 9 KA for fault level. The distribution boards shall be suitably earthed. Legend shall be written on D.B. with paint for identification of D.B. & Circuits.

#### A-03. CABLES:

Cables shall confirm to IS 1554-1976. Cables shall be heavy duty, armoured, PVC insulated & PVC sheathed 1.1 KV grade aluminum or copper. Cable shall be fixed with G.I spacers & saddles at an interval of 45 cms and on every side of bends. The bending radii of cables shall be as per manufacturers instructions and in no case it shall be less than 12 times the overall diameter of the cable. Cable shall be so installed that they are not subject to mechanical damage. If there is a bend in the cable enclosed in a conduit, care has to be taken to prevent undue compression of insulation. This applies also to the top of vertical runs of longer than 5 meters where there could be compression caused by the weight of unsupported vertical cables. Cables may rest without fixing in horizontal runs or ducts or trunkings. The cables run in cable trays shall be fixed with cable ties at intervals of not more than 30 cms. No joints in the cables shall be permitted unless the cables exceed the standard drum length. Joints if so necessary shall be located in accessible position. Termination of the cables shall be done with heavy duty copper/ Aluminum lugs and brass cable glands.

Cables laid under ground shall be to a minimum depth of 750 mm. It shall be ensured that cables laid underground are free of water lines, sewage lines etc. The trenches shall be at least 30 cm wide & filled with 10 cms thick of layer of dry sand on which the cable shall be laid. Further, 10 cms thick sand layer shall be put on the cable over which a brick layer shall be kept. The trench shall than be back filled with soft earth, rammed and consolidated to original level. Cable route indicators shall be laid at intervals of 20 metres and at all change in directions.

For cables laid on walls aluminum tags shall be fixed showing the size of the cable and the feeder number of the cable. These tags shall be at each ends and at least one or two places at intermediate positions.

The mode of measurement of the cables shall be as follows:

- i) For top entry of the cable, the measurement shall be taken up to the bottom of that switch- gear.
- ii) For bottom entry of the cable, the measurement shall be taken up to the top of that switch board. No wastage shall be allowed for measurements.

#### A-04. SWITCH FUSE UNITS:

Switch Fuse Units shall be of sheet metal or iron clad with HRC fuses as described in schedule of quantities. The unit shall be of robust construction of standard specified make, design to withstand adverse working conditions. It shall have quick break type mechanism with ON and OFF position indicators of the operating handle. The switch shall be interlocked so that theunit cannot beopened in ON condition. The interior shall be so arranged that clearance from live parts are adequate and shrouded. Manufacturer's instructions shall be followed for installation of switch fuse units. The switch shall be solidly earthed. The switch shall be mounted on walls on angle iron support grouted to wall. The supports shall be treated for rust treatment & painted with 2 coats of synthetic enamel paint. The height of the switch board shall be such that it is accessible for operation & maintenance.

## A-05. POWER PANELS:

The Power panels shall be fabricated from MS sheet steel 16 gauge and shall be of compartmental design. The main supporting framework shall be of angle iron or of heavier gauge sheet metal. The panel shall be self-supporting design, dust and vermin proof, dead front and fully inter locked with isolating switches. The panel-mounted switches shall have Interlock defeat for testing and inspection.

The panel shall be designed so as to facilitate inspection, cleaning and repairs. The clearance between phase to phase and phase to earth or metal parts shall be as per relevant IS standards. The metering instruments like volt meter, ammeter etc. shall be flush mounted and shall be of 1.0 class accuracy and of standard design size shall be 96 mm  $\times$  96. All indication lamps shall be of neon type.

The panel shall have separate cable ally and a bus bar chamber. The bus bars shall be rigid hard drawn tinned electrolytic copper & sleeved with heat shrinkable sleeves. The current density shall not exceed 1.25 amp per sqmm and the neutral bus shall be rated for capacity of phase bus unless otherwise stated in schedule of quantities/drawings. However, the minimum size of bars shall be 25mmx3mm.

The panel shall be powder coated comprising of degreasing and de-scaling in sulphuric acid etc with synthetic enamel paint for smooth finish. The color of paint shall be battle-ship grey or as directed. The Panel shall be tested at site before commissioning. The Panel drawings shall be got first approved from Consultants before taking up for fabrication.

All wiring inside the panel shall be done with switchboard copper conductors/cables solid copper links. The insulators for supporting the Bus-Bars shall be epoxy based cast resin. All hinged doors shall be earthed with flexible braided copper earth. An earth bus of copper shall be fixed along the length of the panel at the lower section. Adequate ventilation for the panel shall be provided. Logic diagram of operation of switches shall be painted on the panel. The name plates for each feeders shall be of engraved design and pasted to the respective switch gear. The letters shall not be less than 10 mm size for individual feeders and not less than 18 mm for the main feeders. All switchgear to be mounted in the panel shall be as per schedule of quantities.

#### A-06. EARTH PITS/STATION:

The Earthing station shall be done as per IS 3043 (1981). The earth pit shall be at least 2.5mtrs deep with GI Plate electrode. The GI plate electrode shall be hot dipped of 600mm x 600mm x 6mm thick. The size for copper electrode shall be 600x600x3mm thk. An alternate layer of salt and charcoal shall be filled up to 200 mm above the top of the electrode. The electrode shall be connected with 25mm x 6 mm thick GI Flat which shall be terminated with nuts and bolts into brick masonry chamber on top. The brick masonry chamber shall be of size 300mm x 300mm x 300mm deep which will carry the funneling arrangement for watering. A GI Flat of 25 mm x 3 mm from brick masonry chamber to the switch gear inside the switch room shall be laid under ground and/or fixed to walls and the rate for this shall be paid as a separate item.

#### A-07. INSTALLATION OF ELECTRIC FITTINGS:

All Interior fittings shall be fixed with down rods or on round blocks as stated in schedule of quantities. The down rods shall be 20 mm dia and 1.6mm wall thickness of ERW black enameled MS. The down rods shall be fixed with ball and socket joints check nuts etc. Special fixtureslike spot lights etc.shall be fixed to the false ceilings as per manufacturer's recommendations. The fittings shall be connected with 3 core 0.5 sq. mm. flexible copper cord/cable from ceiling rose and suitable earthed.

#### A-08 POWER FACTOR CORRECTION PANEL:

The power factor correction panel shall be fabricated from sheet steel & powder coated. The panel shall be compartmentalized with tinned copper bus bars TPN as described for power panels.

The power capacitors shall be APP type, low loss, 3 phase, delta connected & self discharged type.

The power factor control shall be done by automatic power factor control relay for controlling the power factor within the set limits by auto switching of required capacitor Banks. The required Capacity /P.F Banks shall be as per schedule of quantities. The P.F. shall be automatically corrected to near Unity.

The C.T. ratio given in the Schedule/diagram is indicative. The same shall be matched for correct operation depending upon the operating load. The relay shall be totally microprocessor based for setting the desired target power factor band. The APFC relay shall have indications like power ON, low current etc & shall be of required stages as per schedule of quantities. The P.F Panel shall have Auto Manual switching facility.

The general specification shall be as follows:

- i) System supply voltage 415 volts.
- ii) C.T. secondary rating 5 A, 5 VA Burden.
- iii) Output switching capacity 5A at 230 V AC & 2A at 440 V AC, Operating temperature, 10 degree Centigrade to 50 degree Centigrade. Accuracy better than 1%. Low current release 10% of full rated C.T.

- iv) Switching time between stages 4 to 6 seconds.
- v) Range of indications of PF 0.5 lag to 0.5 lead digital.
- vi) Display LED indications.
- vii) Range of target P.F. setting 0.7 to 0.99.
- viii) Switch for auto/manual operation.
- ix) Indications for selection of stages.
- x) Selection of dead band.

## A-10. TESTING OF INTERIOR INSULATION:

The following tests shall be carried out after completion of the Interior insulation work.

- 1) Insulation Resistance Test.
- 2) Polarity Test of Switches.
- 3) Earth Continuity Test.
- 1) Insulation Resistance Test: The insulation resistance shall be measured by applying between earth and whole system of conductors or any section thereof with all fuses in place and all switches closed (except in earthed concentric wiring) all lamps in position & both poles Interiorly connected together, or direct current pressure of not less than twice the working pressure, provided that it need not exceed 500 volts for medium voltage circuits, be applied. Where the supply is derived from 3 wire DC or Poly phase A.C. System, the neutral pole of which is connected to the earth either direct or through added resistance, the working pressure shall be deemed to be that which is maintained between the phase conductor and the neutral. The insulation resistance measured in mega ohms between all conductors connected to one pole of phase conductor of the supply and all the other conductors and switches in off position it's value shall be not less than as specified below:

The insulation resistance measured in mega ohms shall not be less than 50 mega ohms divided by the number of outlets or when PVC insulated cables are used for wiring, 12.5 mega ohms divided by the outlet subject to a minimum value of 1 mega ohm.

A preliminary and similar test may be made before lamps etc. are installed and in this event the insulation resistance to earth shall not be less than 100 mega ohms divided by the number of outlets or when PVC insulated cables are used 25 mega ohms divided by the number of outletssubject to a minimum of 1 mega ohm.

<u>2) Polarity Test of Switches</u>: In a 2 wire system a test shall be made to verify that all switches in every circuit are fitted in the same conductor through out and such conductors shall be labeled or marked for connection to the phase conductor or to the non earthed conductor of supply.

In a 3 wire or 4 wire insulation a test shall be made to verify that every non linked single pole switch is fitted in a conductor which is labeled or marked to one of the phase conductor of supply.

3) Earth Continuity Test: The Earth Continuity Conductor including metal conduits and metallic envelopes of cables in all cases shall be tested for electric continuity and Interior resistance of the same along with the earthing lead but excluding any added resistance or earth leakage circuit breaker measured from connection with earth electrode to any point in the earth continuity conductor in the completed insulation shall not exceed 1 ohm.

# LIST OF MAKES

Note: Makes in the Bill of Quantities supercedes this List. All makes shall be IS marked wherever applicable.

1. CABLES ISI MARK, 100V (GRADE) CCI, FINOLEX, ASIAN, FORT-

GLOSTER.

2. WIRES: 660V GRADE ISI MARK FINOLEX, V-PLAST

3. ERW M.S.CONDUITS ISI MARK BEC, NIC, ASIAN

4. CASING CAPPING & ACCESSORIES PRECISION, MODI, ASIAN. DIAMOND

5. TRUNKINGS & TRUNKLINKS PRECISION, MODI

6. PVC CONDUITS PRECISION, ASIAN, DIAMOND

7. 5A / 6A PLATE TYPE SWITCHES M.K.INDIA, CLIPSAL.

& SOCKETS, ISI MARK

8. CEILING ROSES, HOLDERS **ANCHOR** 

BUZZERS, BELLPUSH, BELLS ANCHOR

9. DISTRIBUTION BOARDS, MCB's MDS, SIEMENS, LEGRAND

MDS, SIEMENS 10. ELCB/RCCB

11. ELETRICAL FITTINGS PHILIPS, WIPRO

12. FANS AND EXHAUST FANS **CROMPTONS** 

13. REWIRABLE SWITCH FUSE UNITS KEW, BOSMA, STANLEY,

**STANDARD** 

14. CUT-OUT'S KEW, BOSMA, STANLEY,

STANDARD

15. HRC SWITCH FUSE UNITS GEC ALSTOM, L&T, SIEMENS

16. TEAK FRAMED SWITCH: SPEACIAL QUALITY BOARDS

AVAILABLE IN MARKET

17. BUS-BAR CHAMBERS STANLEY, KEW, STENLEY,

STANDARD

| 18. CABLE GLANDS & LUGS       | SIEMENS, DOWELS           |
|-------------------------------|---------------------------|
| 19. INDUSTRIAL SOCKETS        | CROMPTON, MDS             |
|                               | STANDARD, SIEMENS         |
| 20. 15A SWITCH SOCKETS        | ANCHOR                    |
| 21. 16A DP SWITCHES WITH FUSE | ANCHOR                    |
| 22. GEYSERS/WATER HEATER      | SPHERE HOT, RACOLD, USHA  |
| 23. TELEPHONE WIRES           | DELTON, FINOLEX           |
| 24. FLOURESCENT TUBES & BULBS | PHILIPS, WIPRO            |
| 25. G.I. B-CLASS PIPES (ISI)  | ITC, PRAKASH              |
| 26. ELECTRONIC REGULATORS     | ANCHOR, RIDER             |
| 27. CONTACTORS                | L&T, SIEMENS              |
| 29. MCCBs                     | L&T, GEC ALSTOM           |
| 30. MEASURING INSTRUMENTS     | A.E., IMP, MECCO          |
| 31. C.T                       | A.E., IMP, MECCO, SIEMENS |
| 32.CAPACITORS                 | CROMPTON, ASIAN, L&T      |
| 33. P.F. RELAY                | L&T, ENERCON, TRINITY     |
| 34. TELEPHONE OUTLETS:        | M.K.INDIA, LEGRAND        |
|                               |                           |

MDS, CRABTREE

#### **BILL OF QUANTITIES**

The bill of quantities shall be read in conjunction with the drawings, Conditions of and Specifications as these documents are jointly explanatory and descriptive of the works included in the Contract

General directions and descriptions of work and materials given elsewhere in the Contract documents are not necessarily repeated in the Bill of Quantities, reference is to be made to the other documents for information.

The Quantities of work and material in the Bill of Quantities are not to be considered as limiting or extending the scope of work to be done and materials to be supplied by the contractor. The quantities in the Bill of Quantities are an estimate of the amount of work but the work will be measured on complete and the contractor will be paid on the actual measurement of work approved by the Engineer.

Where price have been entered against Lump sum items, payment for such affected items shall be made in proportion to the extent of which at the time of billing, works have been done at the discretion of the Engineer.

'Providing and Fixing' / 'Providing and Laying' / Providing and Erecting' shall mean that the contractor has to provide such materials not being procured and borne by the Employer, but which are required for the item and if no material need be provided by the Contractor, the rate shall be on for fixing/ laying/ erecting of the component covered in the item.

The work also includes separating and stacking serviceable material anywhere in the compound as directed and lowering and carting away all unserviceable material debris from the site.

The acronyms used in the Bill of Quantities.

| S.ft/ SQ. FT./ sqft | Square foot              |
|---------------------|--------------------------|
| r.ft                | Running foot             |
| Kg.                 | Kilogramme               |
| LS                  | Lumpsum                  |
| Nos./ No            | Numbers                  |
| Q.R.O.              | Quoted Rate Only         |
| Architect           | Architect/ Bank Engineer |
| t.w. / T.W./ b.t.c. | Teak wood/ Burma teak    |
| mtrs./ mtr.         | Meter                    |