

Tender ID	<b>AOKNL/RBODMM/019</b>
Date	<b>09.09.2024</b>



INVITES e-TENDERS

**THROUGH E-TENDERING PROCESS**

FOR  
**ELECTRICAL INSTALLATION WORKS AT NEW PREMISES OF RACC  
AND MINI RACPC AT DHARMAVARAM**

Contractors who are on the panel of SBI, Amaravati Circle (LHO) in the appropriate Electrical installation work category are only eligible. (Contractors should submit proof of the same)

**Note:** Firm should possess valid digital signature for this tender

**Last date for submission of e-Tender: 3:00 P.M. (IST) on 25.09.2024**

**Opening of e Tenders: 3:30 P.M. (IST) on 25.09.2024**

**The Regional Manager,**  
State Bank of India,  
RBO, DHARMAVARAM  
DHARMAVARAM

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## NOTICE INVITING TENDER (NIT)

SBI invites Online e tenders for the below mentioned work from the contractors on the approved panel of [SBI, Amaravati Circle in the appropriate Electrical installation work category](#) (contractors to furnish proof of empanel and its validity).

<b>1</b>	Name of the work	<b>ELECTRICAL INSTALLATION WORKS AT NEW PREMISES OF RACC AND MINI RACPC AT DHARMAVARAM</b>
<b>2</b>	Cost of Tender Documents	NIL
<b>3</b>	Date and Time where tender forms are available	Available from <b>15.12.2023</b> to <b>25.09.2024</b> at <b>(i).</b> <a href="https://etender.sbi/">https://etender.sbi/</a> <b>(ii).</b> SBI Procurement news.
<b>4</b>	Time and last date of submission of online e-Tender	Up to <b>3.00pm</b> on <b>25.09.2024</b>
<b>5</b>	Place, Time & Address for submission of e tender/contact person /telephone no/email address.	Up to <b>3.00 pm</b> on <b>25.09.2024</b> <b>A)</b> Tender documents (as specified) through online at <b><a href="https://etender.sbi/">https://etender.sbi/</a></b> <b>B)</b> EMD, Tender fees credit proof physically at the Address: The Regional Manager, State Bank of India, RBO, DHARMAVARAM <b>CM (Comp &amp; Op) : 9000042251</b> <b>mail: <a href="mailto:cmcoop4.aoknl@sbi.co.in">cmcoop4.aoknl@sbi.co.in</a></b>
<b>6</b>	Date, Time and Place of opening of e - Tenders	On at <b>4:00 PM 25.09.2024</b> The Regional Manager, State Bank of India, RBO, DHARMAVARAM <b>CM (Comp &amp; Op) : 9000042251</b> <b>mail: <a href="mailto:cmcoop4.aoknl@sbi.co.in">cmcoop4.aoknl@sbi.co.in</a></b>
<b>7</b>	Quantum of Earnest Money Deposit (EMD).	<b>Rs. 8,400.00</b> (DD-Drawn in favor of <a href="#">SBI, RBO, DHARMAVARAM</a> . payable at <a href="#">DHARMAVARAM</a> ) Contractors who have submitted one time EMD against empanelment need not to submit the EMD again. Proof of the same has to be enclosed.
<b>8</b>	Quantum of Security Deposit (SD).	1. Initial Security Deposit (ISD) – 2% of the Tender value including EMD. 2. Retention Money- Deductible in running bills @ 10% of the value of work and Total deductible is 5% of value of work including EMD, ISD.
<b>9</b>	Estimated cost	<b>Rs. 8,36,550.00+ GST</b>
<b>10</b>	Terms of payment of Bills	<b>1. No Advance will be paid</b> <b>2. One RA bill of minimum Rs. 4.00 lacs can be claimed by the contractor.</b>
<b>11</b>	Penalty clause/Liquidated Damages	<b>@ 0.5%</b> of the value of work per week of delay subject to a maximum penalty of <b>5%</b> of the value of work would be strictly imposed.
<b>12</b>	Stipulated time for completion of the work/supply.	<b>45 Days</b>

<b>13</b>	Validity period of the tender.	<b>180 days</b> from last date for receipt of tender
<b>14</b>	Eligible Taxes	<p><b>A)</b> Income Tax will be deducted at source as per Govt. Guidelines.</p> <p><b>B)</b> Reimbursement of GST will be made only on submission of proper GST invoice as per applicable GST provisions/Rules. The contractor should comply with the following;</p> <ul style="list-style-type: none"> <li>◆ Contractor should have GST Registration Number.</li> <li>◆ Invoice should specifically/separately disclose the amount of GST levied at applicable rate as per GST provisions/Rules.</li> <li>◆ In case of Correction in the bills after scrutiny, contractor should submit fresh bills for payment.</li> <li>◆ Contractor should timely file his GST return in accordance with GST provisions to enable the bank to claim the credit of GST paid to the contractor.</li> <li>◆ The GST Number of State Bank Of India are</li> </ul> <p>For Andhra Pradesh state-37AAACS8577K1ZO  For Telangana State -36AAACS8577K1ZQ  For Puducherry U.T - 34AAACS8577K1ZU</p>
<b>15</b>	Electronic Payment	<p>Electronic payment shall be preferred. All the contractor must furnish contact details for communication in addition to,</p> <ol style="list-style-type: none"> <li>1) Name of the their bank</li> <li>2) Name of their branch</li> <li>3) Account number</li> <li>4) Name of the account holder as in the bank account</li> <li>5) IFSC No of the branch</li> <li>6) PAN number.</li> </ol>
<b>16</b>	For further Clarifications on Technical matters & Agency for arranging e-tender/online bidding	<p>1. All e-Tender/Online bidding related issues, e-Procurement technologies Limited, Ahmedabad.</p> <p>Call : <b>+91 9904406300   +91 9510812960   +91 9265562821   +91 6354919566</b>  e-mail: <a href="mailto:etender.support@sbi.co.in">etender.support@sbi.co.in</a></p> <p>2. All technical matters contact ,  <b>Vijayakumar Bandaru, 9402507007</b></p>
<b>17</b>	Defect Liability Period.	<b>One year</b> from date of Virtual Completion
<b>18</b>	Any additional Information	The quoted rate should be inclusive of materials, labour, wages, fixtures, transportation, installation, all taxes (excluding GST), wastage's, Octroi, machinery, temporary works such as scaffolding, cleaning, overheads, profit, statutory expenses, incidental charges and all related expenses to complete the work

MANDATORY / CHECKLIST DOCUMENTS TO BE SUBMITTED BY BIDDER

- ☑ Scanned copy of D.D/B.C of EMD must be uploaded and physically the same needs to be submitted at given address within due date of tender.
- ☑ Scan copy of letter of empanel should be uploaded, failing which tender summarily rejected.
- ☑ Scan copy of declaration copy duly signed by the respective bidder to be uploaded.
- ☑ Scan copy of valid Electrical contractor license of the respective bidder to be uploaded.
- Scan copy of self declaration by the contractor stating the no. of works in hand at present in Amaravati Circle as per the annexure in page no.: 53
- ☑ The signed and scanned copy of entire tender document in pdf format which is downloaded from **<https://etender.sbi/>**.
  - ◆ *Any clarifications sought after opening of the tenders will not be entertained at any cost. Firm should visit the website till last date of submission for changes/ corrigendum if any.*
  - ◆ *In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.*
  - ◆ *The SBI reserves the right to cancel or postpone the tenders at any stage without assigning any reason.*
  - ◆ *The SBI reserves the right to obtain additional performance bank guarantee for the difference amount from the estimate, if the amount quoted by the contractor is below 10% of the estimated amount. This amount shall be submitted before issuing the work order.*

**REGIONAL MANAGER,  
SBI, RBO, DHARMAVARAM**

## INSTRUCTIONS TO THE TENDERER

### 1.0 NAME OF WORK

Sealed Tenders are invited by State Bank of India for the work of **ELECTRICAL INSTALLATION WORKS AT NEW PREMISES OF RACC AND MINI RACPC AT DHARMAVARAM**

### 1.1 SITE AND ITS LOCATION

The proposed work is to be carried out at: **NEW PREMISES OF SBI, RACC & MINI RACPC, DHARMAVARAM**

### 2.0 TENDER DOCUMENTS

2.1 The work has to be carried out strictly according to the conditions stipulated in tender consisting the following documents and the most workman like manner,

- Instructions to tenderer
- General Conditions of Contract
- Special Conditions of Contract
- Additional Conditions for Electrical Installation
- Technical Specifications
- Drawings
- Priced Bid

2.2 The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below :

- Price Bid
- Technical Specifications
- Additional Conditions for Electrical Installation
- Special Conditions of Contract
- General Conditions of Contract
- Instructions to Tenderer

2.3 Complete set of tender documents including relative drawings can be obtained/downloaded from the

(i). <https://etender.sbi/>

(ii). [SBI Procurement news](#) on any Day during the period mentioned in the NIT.

2.4 The tender documents are not transferable.

### 3.0 SITE VISIT

3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data which may be required for the purpose of filling this tender document and enter into a contract for the satisfactory performance of the work. The Tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labour, the law and order situation, climatic conditions local authorities requirement, traffic regulations etc; The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

3.2 The tenderer should visit the site to ascertain the working conditions and local authority regulations /

restrictions if any and other information required for the proper execution of the work. The work should be carried out at any floor.

#### **4.0 TENDER EVALUATION**

##### **4.1 Submission of Bids/Tender:**

Tenders should be submitted online in the website <https://etender.sbi/>. The tender shall be submitted online in two parts, viz., Technical Bid and Financial/Price Bid with acceptance of Tender Conditions. In addition, scanned copies of required (as mentioned in NIT) Mandatory checklist documents should be submitted online with help of our service provider on the website at <https://etender.sbi/>. The tender document is not required to be sent to us in hard copy.

##### **4.2 Technical bid**

The list of documents, which are mandatory & specified in Tender Notice are to be furnished by the bidder. Only Technical Bids of those contractors, who submit the earnest money in the prescribed manner, will be opened. All Technical bid documents will be verified at the tender opening time specified in Notice Inviting Tender.

1. Technical bids of bidders whose EMD was not received physically, will not be opened.
2. If the Bidders failed to submit the listed mandatory documents, they will be disqualified.
3. Tender documents found partly or fully modified / altered / corrected etc shall stand summarily rejected.
4. Any clarifications sought after opening of the tenders will not be entertained at any cost.
5. Tender Document duly signed & stamped by the respective bidder in pdf format only will be validated.
6. If any bidder submits false/fake document they will be banned from doing work in SBI.
7. Financial bids of those bidders who qualified in technical bid will only be opened.

##### **4.3 Financial bid**

The rates to be quoted in Financial Bid should be in Indian Rupees and excluding GST. The rates are summed up automatically in the SBI e-Tender portal. The rates quoted by the Bidder will be validated/scrutinized by committee and compared to market price for adaptability. The lowest total rate quoted will be considered for award of work.

*The Bank will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.*

#### **5.0 EARNEST MONEY DEPOSIT**

- The tenderer is requested to submit the Earnest Money (as mentioned in NIT) in the form of Demand Draft or Banker's Cheque in favor of State Bank of India drawn on any Bank in India.
- EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with clause 4.1 above shall be rejected.
- No interest will be paid on the EMD.
- EMD of unsuccessful tenderer will be refunded within 30 days of award of Contract.
- EMD of successful tenderer will be retained as a part of security deposit.

**Forfeit of EMD:** *The EMD will be forfeited under the following conditions:*

- *If the tenderer withdraws or amend, impairs or derogates from the tender in any respect within the period of validity of the tender.*
- *If the bidder withdraws the bid before the expiry of the validity period of 90 days of the bid or within the time frame of extension given by SBI in special case communicated before the expiry of the bid.*
- *If the bidder fails to comply with any of the provisions of the terms and conditions of the bid document.*
- *If the selected bidder fails to execute agreement in prescribed format and furnish the Bank Guarantee within the prescribed time.*

## **6.0 INITIAL SECURITY DEPOSIT**

The successful tenderer will have to submit a sum equivalent to 2% of contract value less EMD by means of D/D drawn in favor of State Bank of India within a period of 15 days of acceptance of tender.

## **7.0 SECURITY DEPOSIT**

7.1 Total security deposit comprise of:

- Earnest Money Deposit
- Initial Security Deposit
- Retention Money

and shall be 5% of contract value. Out of this 2% of contract value is in the form of initial security deposit which includes the EMD. Balance 3% shall be deducted from the running account bill of the work at the rate of 10% of the respective running account bill i.e. deduction from each running bill account will be 10% till total 3% of contract value is reached. 50% of the total security shall be paid to the contractors on the basis of SBI/Architects certifying the virtual completion. The balance 50% would be paid to the contractors after the defects liability period as specified in the contract.

7.2 No interest shall be paid to the amount retained by the Bank as Security Deposit.

## **8.0 SIGNING OF CONTRACT DOCUMENTS**

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 15 days from the receipt of intimation of acceptance of his tender by the Bank. However, the written acceptance of the tender by the Bank will constitute a binding agreement between the Bank and successful tenderer whether such formal agreement is subsequently entered into or not.

## **9.0 COMPLETION PERIOD**

The Successful Tenderer shall be complete the work within time period (as mentioned in the NIT) from the date of the work order issued to the contractor to commence the work.

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

## **10.0 VALIDITY OF TENDER**

*Signature of Bidder*

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Tenders shall remain valid and open for acceptance for a period of 3 (Three) months from the date of opening price bid. If the tenderer withdraws his/her offer during the validity period or makes modifications in his/her original offer which are not acceptance to the Bank without prejudice to any other right or remedy the Bank shall be at liberty to forfeit the EMD.

#### **11.0 PAYMENT TERMS**

No advance payment in any form will be granted for the works proposed. Running A/c Bills shall be granted in approved format as mentioned in NIT. Period of taking up the final bill will be one month from/ after satisfactory virtual completion or the date of submission of the final bill whichever is later.

#### **12.0 TAXES AND DUTIES**

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

#### **13.0 RATES AND PRICES**

13.1 The tenderer shall quote their rates for individual items both in words and figures in case of discrepancy between the rates quoted in words and figures the unit rate quoted in words will prevail. If no rate is quoted for a particular item, the contractor shall not be paid for that item when it is executed.

The amount of each item shall be calculated, and the requisite total is given. In case of discrepancy between the unit rate and the total amount calculated from multiplication of unit rate and the quantity the unit rate quoted will govern and the amount will be corrected.

13.2 The tenderer need not quote their rates for which no quantities have been given. In case the tenderer quotes their rates for such items those rates will be ignored and will not be considered during execution.

The tenderer should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly.

13.3 The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed he should immediately bring to the knowledge of the SBI/SBIIMSPL/ Bank.

13.4 Each page of the BOQ shall be signed by the authorized person and cutting or overwriting shall be duly attested by him.

13.5 Each page shall be totaled and the grand total shall be given.

13.6 The rate quoted shall be firm and shall include all costs, allowances, taxes, VAT, levies, etc. excluding GST.

13.7 Bank has the right to offer the contractor to modify the old material wherever/ whenever necessary instead of new supplies.

13.8 The quantities of various items given in the schedule of quantities are approximate. The quantities of work may vary at time of allotment / execution of work. Bank reserves the right to omit / delete any item(s) of work from the schedule at the time of allotment / before. Contractor will be paid for the actual work done at the site duly verified by the concerned official of the Bank.

#### **14.0 ADDITIONAL SECURITY DEPOSIT**

Additional Security deposit (ASD)/Additional performance Guarantee (APG) shall be applicable if the bid price is below 7.5 % of the estimated cost put to tender. The amount of such ASD/ APG works out to the difference between 92.5 % of estimated cost put to tender and the quoted price shall be submitted by the bidder.

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

Sd/-  
**REGIONAL MANAGER,  
SBI, RBO, DHARMAVARAM**

**FORM OF SUBMISSION OF TENDER**

(To be filled by the tenderer)

The Regional Manager,  
State Bank of India,  
RBO, DHARMAVARAM  
DHARMAVARAM.

Dear Sir/s,

Ref: **TENDER FOR ELECTRICAL INSTALLATION WORKS AT NEW PREMISES OF RACC AND MINI RACPC AT DHARMAVARAM**

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

I / We do here by undertaken to execute and complete the whole or part of the work (as desired by you) at the respective rates quoted. I/ We are depositing a sum of Rs. \_\_\_\_\_ .00 (Rupees \_\_\_\_\_ ONLY ) as earnest money deposit by way of demand draft drawn in favor of **SBI RBO, DHARMAVARAM**. payable at **DHARMAVARAM** along with this tender for due execution of the work at my/ our tendered rates.

In the event of this Tender being accepted I/ We agree to enter into the agreement and submit the declaration on requisite non-judicial stamp papers as and when required and execute the contract according to your form of Agreement etc., in default whereof, I/ We do hereby bind my-self / ourselves to forfeit the aforesaid deposit. In the event of this Tender being accepted I/ We agree to obtain the labor license and the CAR and Third-party insurance policy and deposit the balance E.M.D. amount and adhere/comply to all other instructions as given in TENDER DOCUMENT.

I / We further agree to complete the work included in the said schedule of quantities within time **45 DAYS** from the date of the work order issued to commence the same. Date of commencement shall be either one week from the date of work order issued to the contractor or the date on which mark out of work at site has been given to contractor; whichever is later.

I / We agree not to employ sub-contractors other than those that may be approved by Employer. I / We agree to pay all taxes(except GST), insurance charges as prevailing from time to time, on such items for whom same is to be levied by/ for the government, and the rates quoted by me / us are inclusive of all the same.

Yours Faithfully,

**Signature of Witness:**

**Contractor's Signature** \_\_\_\_\_

1.

**Name:** \_\_\_\_\_

2.

**Address:** \_\_\_\_\_

3.

*Signature of Bidder*

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## GENERAL CONDITIONS OF CONTRACT

### 1.0 Definitions

“**Contract**” means the documents forming the tender and the acceptance thereof and the formal agreement executed between State Bank of India (Client) and the contractor, together with the documents referred therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the SBI and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.

1.1.1 ‘**SBI**’ shall mean State Bank of India (client) a body Corporate created under State Bank of India Act 1955, having its Corporate Centre at State Bank Bhavan, Madame Cama Road, Mumbai 400 021 and an LHO at Hyderabad and includes the client’s representatives, successors and assigns.

1.1.3 ‘**Site Engineer**’ shall mean an Engineer appointed by the Bank as their representative to give instructions to the contractors.

1.1.4 ‘**The Contractor**’ shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include legal personal representative of such individual or the composing the firm or company and the permitted assignees of such individual or firms of company.

1.1.5 The expression ‘**works**’ or ‘**work**’ shall mean the permanent or temporary work described in the ‘Scope of Work’ and/or to be executed in accordance with the contract and includes materials, apparatus, equipment, temporary supports, fittings and things of all kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.

1.1.6 ‘**Engineer**’ shall mean the representative of the SBI/Architect.

1.1.7 ‘**Drawings**’ shall mean the drawings prepared by the SBI and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time ‘**Contract value**’ shall mean the value of the entire work as stipulated in the letter of acceptance of tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.

1.1.8 ‘**Specifications**’ shall mean the specifications referred to in the tender and any modifications thereof as may time to time be furnished or approved by the SBI/Architect “**Month**” means calendar month.

1.1.9 “**Week**” means seven consecutive days.

1.1.10 “**Day**” means a calendar day beginning and ending at 00 Hrs. and 24 hrs respectively.

### 2.0 Scope of Work

The contractor shall carry out, complete and maintain the said work in every respect strictly in accordance with this contract and with the directions of and to the satisfaction of the Bank to be communicated through the bank/Architect. The Bank from time to time issue further drawings and/or written instructions, details directions and explanations which are hereafter collectively referred to as SBI/Architect’s instructions in regard

to : the variation or modification of the design, quality or quantity of work or the addition or omission or substitution of any work, any discrepancy in the drawings or between the BOQ and/or drawings and/or specifications, the removal from the site of any material brought thereon by the contractor and the substitution of any other materials thereof, the demolition, removal and/or re-execution of any work executed by him, the dismissal from the work of any person employed/engaged thereupon.

### **3.0 (i) Letter of Acceptance**

Within the validity period of the tender the Bank shall issue a letter of acceptance either directly or through the Architect by registered post or otherwise depositing at the address of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a binding contract between the SBI and the contractor.

### **(ii) Contract Agreement**

On receipt of intimation of the acceptance of tender from the SBI/Architect the successful tenderer shall be bound to implement the contract and within fifteen days thereof he shall sign an agreement in a non-judicial stamp paper of appropriate value.

### **Copies of Agreement**

Two copies of agreement/tender document duly signed by both the parties with the drawings shall be handed over to the contractors.

### **4.0 Detailed drawings and instructions**

The SBI directly or through its Architects shall furnish with reasonable promptness additional instructions by means of drawings or otherwise necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the contract documents, true developments thereof and reasonably inferable there from.

The work shall be executed in conformity therewith and the contractor prepare a detailed programme schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the SBI.

### **Ownership of drawings**

All drawings, specifications and copies thereof furnished by the SBI directly or through its Architects are the properties of the SBI. They are not to be used on other work.

### **5.0 Commencement of Works**

The date of commencement of the work will be reckoned as the recorded date of handing over site by the SBI or 15 days from the date of issue of Letter of Acceptance of Bank, whichever is later.

### **6.0 Schedule of Quantities**

i) The bill of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard Method of Measurements The rate quoted shall remain valid for variation of quantity against individual item to any extent subject to maximum variation of the contract value by 25%. The entire amount paid under Clause 20 hereof as well as amounts of prime cost and provisional sums, if any, shall be excluded.

ii) Variation exceeding 25%: The items of work executed in relation to variation exceeding 25% shall be paid on the basis of provisions of clause 21(e) hereof.

### **Approximate Quantities and Rates**

- The quantities given in BOQ are those upon which the lump sum cost of the work is based. They are subjected to alterations omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of the work to be done. The unit rate noted below are those governing payment of extras or deductions for omissions, according to the conditions of the contract as set forth in the preliminary specifications of the Andhra Pradesh detailed standard specifications and other conditions or specifications of this contract.
- It is to be expressly understood that the measured work is to be taken net (notwithstanding) any custom or practice to the contrary according to the actual quantities when in place and finished according to the drawings or as may be directed from time to time by the SBI, and the cost calculated by measurements or weight, at the respective prices, without any additional charge for any necessary or contingent works connected there with. The rates quoted are for work in site and complete in every respect.
- If any operation of work, which is specified in the respective items mentioned in the schedule of quantities, is not executed by the contractor then proportionately the amount shall not be paid.

### **7.0 Language Errors, Omissions and Discrepancies**

In case of errors, omissions and/or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc., the following order shall apply.

- i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
- ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.
- iii) Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the latter shall be adopted.
- iv) In case of difference between rates written in figures and words, the rate in words shall prevail.
- v) Between the duplicate/subsequent copies of the tender, the original tender shall be taken as correct.

### **8.0 Materials, Appliances and Employees**

Unless or otherwise specified the contractor shall provide and pay for all materials, labor, water, power, tools, equipment transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by the SBI/Architect he shall be removed from the site immediately.

### **9.0 Quality of Materials, Workmanship & Test**

#### **(i) All materials and workmanship**

All materials & workmanship shall be best of the respective kinds described in the contract and in accordance with SBI/Architect instructions and shall be subject from time to time to such tests as the SBI/Architect may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labor and materials

#### **(ii) Samples**

All samples of adequate numbers, size, shades & pattern as per specifications shall be supplied by the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature/test certificate of the same shall be provided to the satisfaction of the SBI / Architect. Before submitting the sample/literature the contractor shall satisfy

himself that the material/equipment for which he is submitting the samples/literature meet with the requirement of tender specification. Only when the samples are approved in writing by the SBI/Architect the contractor shall proceed with the procurement and installation of the material/equipment.

The approved samples shall be signed by the SBI/Architect for identification and shall be kept on record at site office until the completion of the work for inspection/comparison at any time. The SBI/Architect shall take reasonable time to approve the sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials/equipments etc. shall be to the account of the contractor.

**(iii)Cost of tests**

The cost of making any test shall be borne by the contractor if such test is intended by or provided for in the specifications or BOQ.

**(iv)Cost of test not provided for**

If any test is ordered by the SBI/ Architect which is either:

(a) If so intended by or provided for or ( in the cases above mentioned) is not so particularized or through so intended or provided for but ordered by the SBI/Architect which is either to be carried out by an independent person at any place other than the site or the place of manufacture or fabrication of the materials tested or any Government/approved laboratory, then the cost of such test shall be borne by the contractor.

**10.0 Work Performed at Contractors Risk**

The contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, goods, signs, temporary passages or other protection necessary for the purpose. All works shall be done by the contractor's risk and if any loss or damage shall result from fire or from others cause, the contractor shall promptly repay or replace such loss or damage free from all expenses to the employer. The contractor shall be responsible for any loss or damage to materials, tools or other articles used held for use in connection with the work. The work shall be carried on to completion without interferences with the operations of existing machinery or equipment, if any

**11.0 Authorities, Notices, Patent rights and Royalties**

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

The contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer

The Contractor shall identify the Employer against all claims in respect of patent rights, designs, trademarks or name or the protected rights in respect of any constructional plant, machine, work or material used for or in connection with the works or temporary works and from and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the SBI, before any such infringement

and received their permission to proceed and shall himself pay all royalties, license fees, damages, cost and charges of all and every sort that may be legally incurred in respect thereof.

#### **12.0 Permits, Laws and Regulations**

Permits and licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contractor. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify the SBI in writing under intimation of the SBI/Architect. If the contractor performs any act which is against the law, rules and regulations he shall meet all the costs arising there from and shall indemnify the SBI any legal actions arising there from.

#### **13.0 Setting out Work**

The contractor shall set out the work and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof and get it approved by the SBI/Architect before proceeding with the work. If at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the SBI/Architect the contractor shall be responsible for the same and shall at his own expenses rectify such error, if so, required to satisfaction of the SBI.

#### **14.0 Protection of works and property**

The contractor shall continuously maintain adequate protection, of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss due to his fault or negligence except which are due to causes beyond his control. He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protection of his employees on the works and shall comply with all applicable provisions of Government and local bodies' safety laws and building codes to prevent accidents, or injuries to persons or property of about or adjacent to his place of work. The contractor shall take insurance covers as per clause 22.0 at his own cost. The policy may be taken in joint names of the contractors and the SBI and the original policy may be lodged with the SBI.

#### **15.0 Obtaining Information related to execution of work**

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work nor any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

#### **16.0 Contractor's superintendence**

The contractor shall give necessary personal superintendence during the execution of the works and as long, thereafter, as the SBI/Architect may consider necessary until the expiry of the defect liability period, stated hereto.

#### **17.0 Dismissal of Workmen**

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



### **18.0 Rate of progress**

Whole of the materials, plant and labor to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the SBI/Architect. Should the rate of progress of the work or any part thereof be at any time be in the opinion of the SBI/Architect too slow to ensure the completion of the whole of the work by the prescribed time or extended time for completion the SBI/PL/Architect shall thereupon take such steps as considered necessary by the SBI/Architect to expedite progress so as to complete the works by the prescribed time or extended time. Such communications from the SBI/Architect neither shall relieve the contractor from fulfilling obligations under the contract nor he shall be entitled to raise any claims arising out of such directions.

### **19.0 Assignment and subletting**

The whole of work included in the contract shall be executed by the contractor and he shall not directly entrust and engage or indirectly transfer assign or under let the contract or any part or share thereof or interest therein without the written consent of the SBI and no undertaking shall relieve the contractor from the responsibility of the contractor from active superintendence of the work during its progress.

### **20.0 Variations:**

No alteration, omission or variation ordered in writing by the SBI/Architect shall vitiate the contract.

In case the SBI/Architect thinks proper at any time during the progress of works to make any alteration in, or additions to or omission from the works or any alteration in the kind or quality of the materials to be used therein, the SBI/Architect shall give notice thereof in writing to the contractor or shall confirm in writing within seven days of giving such oral instructions the contractor shall alter to, add to, or omit from as the case may be in accordance with such notice but the contractor shall not do any work extra to or make any alteration or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulations, specifications or contract drawings without previous consent in writing of the SBI/Architect and the value of such extras, alterations, additions or omissions shall in all cases be determined by the SBI/Architect and the same shall be added to or deducted from the contract value, as the case may be.

### **21.0 Valuation of Variations**

No claim for an extra shall be allowed unless it shall have been executed under the authority of the SBI/Architect with the concurrence of the SBI as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

**a)** i) The net rates or prices in the contract shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.

ii) Rates for all items, wherever possible should be derived out of the rates given in the priced Bill of Quantities.

**b)** The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of works are carried out, otherwise the prices for the same shall be valued under sub clause (c) hereunder.

**c)** Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the SBI/Architect of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the SBI/Architect shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.

d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender of the BOQ or, if not, so stated then in accordance with the local day work rates and wages for the district; provided that in either case, vouchers specifying the daily time (and if required by the SBI/Architect) the workman's name and materials employed be delivered for verifications to the SBI/Architect at or before the end of the week following that in which the work has been executed.

e) It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the contractor shall submit rates duly supported by rate analysis worked on the "market rate basis" for material, labor, hire/running charges of equipment and wastage's etc. plus 15% towards establishment charges, contractor's overheads and profit. Such items shall not be eligible for escalation.

## **22.0 Insurance of Works**

**22.1** Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the SBI and the contractor against all loss or damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBI and contractor are covered for the period stipulated in clause 23 of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

a) The works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.

b) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.

c) Such insurance shall be effected with an insurer and in terms approved by the SBI which approval shall not be unreasonably withheld and the contractor shall whenever required produce to the SBI/Architect the policy of insurance and the receipts for payment of the current premiums.

## **22.2 Damage to persons and property**

The contractor shall, except if and so far as the contract provides otherwise indemnify the SBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to :

a) The permanent use or occupation of land by or any part thereof.

b) The right of SBI to execute the works or any part thereof, on, over, under, in or through any lands.

c) Injuries or damages to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contract.

d) Injuries or damage to persons or property resulting from any act or neglect of the SBI, their agents, employees or other contractors not being employed by the contractor or in respect of any claims,

proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the SBI, their employees, or agents or other employees, or agents or other contractors for the damage or injury.

### **22.3 Contractor to indemnify SBI**

The contractor shall indemnify the SBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause 22.2 of this clause.

### **22.4 Contractor's superintendence**

The contractor shall fully indemnify and keep indemnified the SBI against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made under or action brought against SBI in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the SBI if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the SBI/Architect in this behalf.

### **22.5 Third Party Insurance**

22.5.1 Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause 09.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of SBI, or to any person, including any employee of the SBI, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 2.0 & 9.0 thereof.

**22.5.2 Minimum Amount of Third-Party Insurance:** Such insurance shall be effected with an insurer and in terms approved by the SBI which approval shall not be reasonably withheld and for at least the amount stated below. The contractor shall, whenever required, produce to the SBI/Architect the policy or policies of insurance cover and receipts for payment of the current premiums.

### **22.6 Minimum Insurance Cover**

The minimum insurance cover for physical property, injury, and death is Rs.5.0lacs per occurrence with the number of occurrences limited to four. After each occurrence contractor will pay additional premium necessary to make insurance valid for four occurrences always.

### **22.7 Accident or Injury to Workmen**

**22.7.1** The SBI shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the SBI or their agents, or employees. The contractor shall indemnify and keep indemnified SBI against all such damages and compensation, save and except as aforesaid and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

### **22.7.2 Insurance against accidents etc. to workmen**

The contractor shall insure against such liability with an insurer approved by the SBI during the whole of the time any person employed by him on the works and shall, when required, produce to the SBI/Architect such

policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that SBI is indemnified under the policy but the contractor shall require such sub-contractor to produce to the SBI/Architect when required such policy of insurance and the receipt for the payment of the current premium.

### **22.7.3 Remedy on Contractor's failure to insure**

If the contractor fails to effect and keep in force the insurance referred to above or any other insurance which he may be required to effect under the terms of contract, then and in any such case the SBI may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the SBI as aforesaid and also deduct 15% of contract value from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

**22.7.4** Without prejudice to the other rights of the SBI against contractors, in respect of such default, the Bank shall be entitled to deduct from any sums payable to the contractor the amount of any damages costs, charges, and other expenses paid by the SBI and which are payable by the contractors under this clause. The contractor shall upon settlement by the insurer of any claim made against the insurer pursuant 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.

### **23.0 Extension of Time**

If, in the opinion of the SBI/Architect, the work be delayed for reasons beyond the control of the contractor, the SBI/Architect may submit a recommendation to the SBI to grant a fair and reasonable extension of time for completion of work as per the terms of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the SBI through the SBI/Architect in writing at least 30 days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reasons in detail and his justification if any, for the delays. The SBI/Architect shall submit their recommendations to the SBI in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended time which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the SBI the provision of liquidated damages as stated under clause 24.0 of GCC shall become applicable. Further contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

### **24.0 Liquidated Damages**

If the contractor fails to maintain the required progress in terms of clause 18.0 of GCC or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the SBI on account of such breach to pay a liquidated damages at the rate of 0.5% of the contract value per week subject to a maximum of 5% of the contract value.

### **25.0 Inspection of Work**

The SBI/Architect or their representatives shall at all reasonable time have free access to the work site and/or to the workshop, factories or other places where materials are lying or from where they are obtained and the

contractor shall give every facility to the SBI, Architect and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBI/Architect except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's organization a wing of Central Vigilance Commission.

#### **26.0 No compensation for restrictions of work**

If at any time after acceptance of the tender SBI shall decide to abandon or reduce the scope of work for any reason whatsoever and hence not require the whole or any part of the work to be carried out, the SBI/Architect shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter.

The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work fully but which he did not derive in consequence of the foreclosure of the whole or part of the work.

Provided that the contractor shall be paid the charges on the cartage only of materials actually and bonafied brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any portion thereof and then taken back by the contractor, provided however that the Architect shall have in such cases the option of taking over all or any such materials at their purchase price or a local current rate whichever is less. In case of such stores having been issued from SBI stores and returned by the contractor to stores, credit shall be given to him at the rates not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of SBI/Architect shall be final.

#### **27.0 Time for completion**

Time is the essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period as mentioned in Notice from the date of commencement. If required in the contract or as directed by the SBI/Architect, the contractor shall complete certain portions of work before completion of the entire work. However, the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.

#### **28.0 Action Where there is no Specification**

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

#### **29.0 Suspension of work**

i) The contractor shall, on receipt of the order in writing of the SBI/Architect (whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time and in such manner as SBI/ Architect may consider necessary so as not cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons.

- a) On account any default on the part of the contractor, or
- b) For proper execution of the works or part thereof for reasons other than the default of the contractor, or
- c) For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the SBI/Architect.

ii) If the suspension is ordered for reasons (b) and (c) in sub-Para (i) above:

The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

### **30.0 Action when the whole security deposit is forfeited**

In any case in which under any clause or clauses of this contract, the Contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the SBI/Architect shall have the power to adopt any of the following course as they may deem best suited to the interest of the SBI.

a) To rescind the contract (of which rescission notice in writing to the contractor by the SBI/Architect shall be conclusive evidence) and in which case the security deposit of the contractor shall be forfeited and be absolutely at the disposal of SBI.

b) To employ labor paid by the SBI and to supply materials to carry out the work, or any part of the work, debiting the contractor with the cost of the labor and materials (the cost of such labor and materials as worked out by the SBI/ Architect shall be final and conclusive against the contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract the certificate of SBI/Architect as to the value of work done shall be final and conclusive against the contractor.

c) To measure up the work of the contractor, and to take such part thereof as shall be unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess the certificates in writing of the SBI/Architect shall be final and conclusive) shall be borne by original contractor and may be deducted from any money due to him by SBI under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by the SBI the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any material or entered into any engagements or make any advances on account of, or with a view to the execution of the work or the performance of the contract and in case the contract shall be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the SBI/Architect will have 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.

### **31.0 Prices for Extras etc., Ascertainment**

The rates of extra items will be ascertained as below

a) The rates will be derived from the rates of items already quoted in the original tender for the extra work.

b) Where extra work cannot be properly measured or valued, the contractor shall be allowed any work prices at the net rates stated in the tender or the priced schedule of quantities, or if not so stated, then in accordance with the local day work, rates and wages for the district, provided that in either case vouchers specifying the daily time (and if required, the workman's name) and materials employed at or before the end of the week following that in which the work has been executed.

c) The measurements and valuations in respect of the extra items of contract shall be completed within the 'period of final measurement' or within three months of the completion of the contract works as defined under clause (Certificate of Virtual Completion)

### **32.0 Extra Items Rates**

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

### **33.0 Virtual Completion Certificate (VCC)**

On successful completion of entire works covered by the contract to the full satisfaction of the SBI, the contractor shall ensure that the following works have been completed to the satisfaction of the SBI.

- a) Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labor, equipment and machinery.
- b) Demolish, dismantle and remove the contractor's site office, temporary works, structures including labor sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the SBI and not incorporated in the permanent works.
- c) Remove all rubbish, debris etc. from the site and the land allotted to the contractor by the SBI and shall clear, level and dress, compact the site as required by the SBI.
- d) Shall put the SBI in undisputed custody and possession of the site and all land allotted by the SBI.
- e) Shall hand over the work in a peaceful manner to the SBI.
- f) All defects/imperfections have been attended and rectified as pointed out by the SBI to the full satisfaction of SBI.

Upon the satisfactory fulfillment by the contractor as stated above, the contractor shall be entitled to apply to the SBI/Architect for the certificate. If the SBI/Architect is satisfied of the completion of the work, relative to which the completion certificate has been sought, the SBI/Architect shall within fourteen (14) days of the receipt of the application for virtual completion certificate, issue a VCC in respect of the work for which the VCC has been applied.

This issuance of a VCC shall be without prejudice to the SBI's rights and contractor's liabilities under the contract including the contractor's liability for defects liability period nor shall the issuance of VCC in respect of the works or work at any site be construed as a waiver of any right or claim of the SBI against the contractor in respect of works or work at the site and in respect of which the VCC has been issued.

### **34.0 Removal of Improper Work**

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

### **35.0 Defects after Completion**

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, peeling off laminate, false ceiling cracks, or any other faults, which may appear within 12 months after completion of the work. In the default, the Employer may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted by the employer, in lieu of such amending and making good by the contractor, deduct from any money due to the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient recover that balance from the contractor from the amount retained (retention money) together with any expenses the Employer may have incurred in connection therewith.

### **36.0 Works to be measured**

The SBI/Architect may from time to time intimate to the contractor that he required the work to be measured and the contractor shall forthwith attend or send a qualified representative to assist the SBI in taking such measurements and calculation and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the Mode of measurements detailed in the specifications. The representative of the SBI/Architect shall take joint measurements with the contractor's representative and the measurements shall be entered in the measurement book.

The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance. All the corrections shall be duly attested by both representatives. No over writings shall be made in the M book. Should the contractor not attend or neglect or omit to depute his representative to take measurements then the measurements recorded by the representative of the SBI/Architect shall be final. All authorized extra work, omissions and all variations made shall be included in such measurements.

### **37.0 Final Measurement**

The measurement and valuation in respect of the contract shall be completed within six months of the virtual completion of the work.

### **38.0 Work by other agencies**

The SBI/SBI/Architect reserves the rights to use premises and any portion of the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with the SBI. Such work shall be carried out in such manners not to impede the progress of the works included in the contract.

### **39.0 Notices and Statutory Regulations**

The contractor shall give all notices and pay all fees and shall comply all Acts and Regulations for the successful completion of the contract works. The whole of the work is to be complied with as per the requirements and bylaws of the relevant statutory authorities including contract labor (Regulation and Abolition) Act 1970.

### **40.0 Clearing Site on Completion**

On completion of the works the contractor shall clear away and remove from the site all machinery, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and



in a workmanlike condition to the satisfaction of the Employer/SBIs.

#### **41.0 Architect's Delay in Progress**

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

#### **42.0 Failure by Contractor Comply with Architect Employer's Instructions**

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

#### **43.0 Owner's Right to Terminate the Contract**

If the contractor being an individual or a firm commit any 'Act of Insolvency' or shall be adjusted an insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Government and of the Official Assignees of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the SBI/Architect that he is able to carry out and fulfill the contract, and to give security therefore if so required by the SBI/Architect. Or if the contractor (whether an individual firm or incorporated Company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor. Or shall assign or sublet this contract without the consent in writing of the SBI through the SBI/Architect or shall charge or encumber this contract or any payment due to which may become due to the contractor there under.

a) Has abandoned the contract; or

b) Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the SBI through the SBI/Architect written notice to proceed, or

c) Has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the SBI through the SBI/Architect that the said materials were condemned and rejected by the SBI/Architect under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the contractor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of the SBI's or SBI/Architect's instructions to the contrary subject any part of the contract. Then and in any of said cases the SBI and or the SBI/Architect, may not withstanding any previous waiver, after giving seven days notice in writing to the contractor, determine the contract, but without thereby affecting the powers of the SBI or the SBI/Architect or the obligation and liabilities of the contractor the whole of which shall continue in force as fully as if the contract had not been so determined and as if the works subsequently had been executed by or on behalf of the contractor. And, further the SBI through the SBI/Architect, their agents or employees may enter upon and take possession of the work and all plants, tools, scaffolding's,

materials, sheds, machines lying upon the premises or on the adjoining lands or roads, use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to complete the work and the contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the SBI or the SBI/Architect shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receipt thereof by him the SBI sell the same by public auction after due publication and shall adjust the amount realized by such auction. The contractor shall have no right to question any of the acts of the SBI incidental to the sale of the materials etc.

#### **44.0 Certificate of Payment**

The contractor shall be entitled under the certificates to be issued by the SBI/Architect to the contractor within 10 working days from the date of certificate to the payment from SBI from time to time. The SBI shall recover the statutory recoveries and other dues including the retention amount from the certificate of payment. Provided always that the issue of any certificate by the SBI/Architect during the progress of works or completion shall not have effect as certificate of satisfaction or relieve the contractor from his liability under clause.

The SBI/Architect shall have power to withhold the certificate if the work or any part thereof is not carried out to their satisfaction.

The SBI/Architect may by any certificate make any corrections required in previous certificate.

The SBI shall modify the certificate of payment as issued by the SBI/Architect from time to time while making the payment.

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement book (M.B).

The contractor shall not submit interim bills when the approximate value of work done by him is less than amount specified in NIT and the minimum interval between two such bills shall be one month.

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and SBI/Architect shall issue the certificate of payment within a period of two months. The SBI shall pay the amount within a period of three months from the date of issue of certificate provided there is no dispute in respect of rates and quantities.

#### **45.0 Settlement of Disputes and Arbitration**

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or the execution or failure to execute the same, whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter :

i) If the contractor considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the SBI or in case the contractor wants to dispute the

validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the Contractor shall forthwith give notice in writing of his claim, or dispute to the Assistant General Manager (Premises& Estate)/Dy. General Manager (Premises) and endorse a copy of the same to the SBI, within 30 days from the date of dis allowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the Bank be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) in the manner and within the time as aforesaid. The contractor shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) in writing in the manner and within the time aforesaid.

ii)The Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) shall give his decision in writing on the claims notified by the contractor. The contractor may within 30 days of the receipt of the decision of the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) submit his claims to the conciliating authority namely the Circle Development Officer/General Manager (Corporate Services) for conciliation along with all details and copies of correspondence exchanged between him and the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises).

iii)If the conciliation proceedings are terminated without settlement of the disputes, the contractor shall, within a period of 30 days of termination thereof shall give a notice to the concerned Chief General Manager/Dy. Managing Director &Corporate Development Officer of the Bank for appointment of an arbitrator to adjudicate the notified claims failing which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.

iv)Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the Chief General Manager/Dy. Managing Director &Corporate Development Officer. It will also be no objection to any such appointment that the Arbitrator so appointed is a Bank Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as Bank Officer. 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 by the said Chief General Manager/Dy. Managing Director &Corporate Development Officer. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

It is also a term of this contract that no person other than a person appointed by such Chief General Manager aforesaid should act as arbitrator.

The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a Bank Officer.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

## **SPECIAL CONDITIONS OF CONTRACT**

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

### **1.0 Work during nights and holidays**

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the SBI/Architect, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the SBI/Architect. However the provision of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order to achieve the progress and quality of the part of the works being technically required and continued with the prior approval of the SBI/Architect at no extra cost to the SBI. All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

### **2.0 Site Supervision**

The contractor shall appoint at his own cost competent and adequate number of qualified Engineers at site,

- (1) for joint measurements and preparations of bills,
- (2) for testing materials at site and outside laboratory,
- (3) for other general supervision. Their appointment shall be approved by the Employer / SBI.
- (4) The site Engineers shall not be removed from the site without the written consent of the Employer / SBI.

### **3.0 Cutting and Making Good**

Where it is found necessary to interfere with finished work in order to execute this contract, the contractor will be required to do all necessary work at his expenses. Only approved hangers and bolts or other metal fixing devices shall be used to secure frames panels and other units in position. Wooden plugs will not be permitted. Holes shall be formed with electric drills whenever possible. Structural members shall not be cut or drilled without prior consent of the client.

### **4.0 Typographical Clerical Errors**

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

### **5.0 Water supply**

The contractor shall make his own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:

- i) That the water used by the Contractor shall be fit for construction purpose to the satisfaction of the SBI/Architect.
- ii) The Contractor shall make alternative arrangements for the supply of water if the arrangements made by the Contractor for procurement of water in the opinion of the SBI/Architect is unsatisfactory.

### **6.0 Power supply**

The contractor shall make his own arrangements for power and supply/distribution system for driving plant or

machinery for the work and for lighting purpose at his own cost. The cost of running and maintenance of the plants are to be included in his tender prices. He shall pay all fees and charges required for the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approvals from the appropriate authorities, if required.

#### **7.0 Treasure Trove etc.**

Any treasure trove, coin or object antique which may be found on the site shall be the property of SBI and shall be handed over to the Bank immediately.

#### **8.0 Unfixed Materials**

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

#### **9.0 Custody and Security of Materials**

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

#### **10.0 Method of Measurement**

Unless otherwise mentioned in the schedule of quantities or in mode of measurement, the measurement will be on the net quantities or work produced in accordance with up to date. Rules laid down by the Bureau of Indian Standards. In the event any dispute/disagreement the decision of the SBI/Architect shall be final and binding on the contractor.

#### **11.0 Maintenance of Registers**

The contractor shall maintain the following registers as per the enclosed format at site of work and should produce the same for inspection of SBI/SBI/Architect whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities/Government from time to time.

- i) Register for secured advance
- ii) Register for hindrance to work
- iii) Register for running account bill
- iv) Register for labor

#### **12.0 Force majeure**

12.1 Neither contractor nor SBI shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable control of the party affected or prevented or delayed. However, a notice is required to be given within 30 days from the happening of the event with complete details, to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.

12.2 As soon as the cause of force majeure has been removed the party whose ability to perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.

12.3 From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With the cause itself and inability resulting there from having been removed, the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.

12.4 Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting to a period of 6 months or more the two parties shall mutually decide regarding the future execution of this agreement.

### **13.0 Local Laws, Acts, Regulations**

The contractor shall strictly adhere to all prevailing labor laws inclusive of contract labor (regulation and abolition act of 1970) and other safety regulations. The contractor shall comply with the provision of all labor legislation including the latest requirements of all the Acts, laws, any other regulations that are applicable to the execution of the project.

- i) Minimum Wages Act, 1948 (Amended)
- ii) Payment of Wages Act 1936 (Amended)
- iii) Workman's Compensation Act 1923 (Amended)
- iv) Contract Labor Regulation and Abolition Act 1970 and Central Rules 1971 (Amended)
- v) Apprentice Act 1961 (Amended)
- vi) Industrial Employment (Standing Order) Act 1946 (Amended)
- vii) Personal Injuries (Compensation Insurance) Act 1963 and any other modifications
- viii) Employees' Provident Fund and Miscellaneous Provisions Act 1952 and amendment thereof
- ix) Shop and Establishment Act
- x) Any other Act or enactment relating thereto, and rules framed there under from time to time.

### **14.0 Amendment**

The central government may from time to time add to or amend the regulation and on any question as to the application, interpretation or effect of these regulations the decision of the chief labor commission or deputy chief labor commission to the government of India, or any other person authorized by the central government in that behalf shall be final.

### **15.0 Contractor's Labor Regulations**

Contractors should strictly follow the labor regulations as per the latest Indian Government acts. Periodical wages, Insurance coverages, Employee minimum allowances...etc. must be availed for all the staff. All the Licenses and necessary Registers to be maintained by the Contractor shall be verified by SBI anytime.

### **16.0 Delayed Payments**

Any amounts payable by the Employer to the contractor in pursuance of any Certificate given by the SBI hereunder shall, if not paid within the 'Period of honoring of Certificate' no interest will be paid by the Employer.

### **17.0 SAFETY CODE/SAFETY MEASURES**

1. All personnel at site should be provided with Helmets and Safety Boots with some Identification Mark. Visitors also should be provided with Helmets. It should be ensured that these are used properly.
2. First Aid Box should be kept at site with all requisite materials.

- 3.** No one should be allowed to inspect / work at a height without Safety Belt.
- 4.** Suitable scaffolds should be provided for workmen for all Works that cannot safely be done from the ground, or from solid construction except such short period Work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well as suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than  $\frac{1}{4}$  to 1 ( $\frac{1}{4}$  horizontal and 1 vertical).
- 5.** Scaffolding or staging more than 3.5 meters above the ground or floors, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 Meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 6.** Working platforms, Gangways, and Stairways should be so constructed that they do not sag unduly or unequally, and if the height of the platform or the Gangway or the Stairway is more than 3-5 Meters above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced, as described.
- 7.** Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 Meter.
- 8.** Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 Meters in length while the width between side rails in rung ladder shall in no case be less than 30cms for ladder up to and including Meters in length. For longer ladders this width should be increased at least 6mm for each additional 30 cm. Uniform step spacing shall not exceed 30 cm.
- 9.** Adequate precautions shall be taken to prevent danger from electrical equipments. For electrical online works gloves, rubber mats, and rubber shoes shall be used.
- 10.** All trenches 1.2 Meters or more in depth shall at all times be supplied with at least one ladder for each 30 Meters length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 1 Meter above the surface of the ground. The sides of the trenches, which are 1.5 Meters or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 Meters of the edge of the trench or half of the depth of the trench whichever is more cuttings shall be done from top to bottom. Under no circumstances undermining or under cutting shall be done.
- 11.** Before any demolition work is commenced and also during the process of the work :-
  - a) All roads and open areas adjacent to the Work Site shall either be closed or suitably protected;
  - b) No electrical cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
  - c) All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion or flooding. No floor, roof or other part of the building shall be so over-loaded with debris or materials



as to render it unsafe.

d) All necessary personal safety equipment as considered adequate by the Site Engineer should be kept available for the use of the persons employed on the Site and maintained in a condition suitable for immediate use; and the Contractor should take adequate steps to ensure proper use of equipment by those concerned.

e) Workers employed on mixing Asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.

f) Those engaged in white washing and mixing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.

g) Those engaged in welding works shall be provided with Welder's protective eye-shields.

h) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

i) When workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals and boards to prevent accident to the Public.

**12.** Use of hoisting machines and tackle including their attachments, anchorage and support shall conform to the following standard or conditions:-

a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defect and shall be kept in good repairs and in good working order.

b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of any hoisting machine including any scaffold, winch or give signals to the operator.

d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension the safe working load shall be ascertained by adequate means.

e) Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

f) Motor, Gearing, Transmission, Electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will

reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced.

g) When workers are employed on electrical installation, which are already energized, insulating mats, wearing apparel such as gloves, sleeves, and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.

**13.** All scaffolds, ladders and other safety devices, mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.

#### **18.0 Accidents**

The contractor shall immediately on occurrence of any accident at or about the site or in connection with the execution of the work report such accident to the SBI/Architect. The contractor shall also report immediately to the competent authority whenever such report is required to be lodged by the law and take appropriate actions thereof.

## ADDITIONAL CONDITIONS FOR ELECTRICAL INSTALLATION WORKS

Unless otherwise specified in Technical specifications / General Conditions / Special Conditions the additional conditions for Electrical Installations shall be adopted. The Electrical wiring installations and other accessories shall comply with latest IS (Indian Standard Codes) and National Electrical code – 1985.

1. The contractor should depute one person at site from start of work to finish for giving temporary connections & attending problems.
2. The contractor should work according to the final layout.
3. The contractor should submit & approve make list with arch./ bank's engineer / ele. Architect before working & submit signed copy with final bill submission.
4. The contractor should check approved make list before quote.
5. The contractor should submit test certificate of panel from panel builder as per proforma given in tender. but the panel should be made as per cpri terms & conditions & also approved by bank's electrical engineer / Architect. The contractor should follow the GA drawing & panel SLD if given in tender (if given).
6. Lowest bidder shall be decided after deducting the buyback value.
7. The contractor should submit bank guarantee or warranty of fixtures - led for min. 3 years.
8. Contractor should be submitted the certificate of wires those used for the branch from duly signed by company authorized person. - per project basis.
9. Earth resistance should be checked & submitted the report with duly signed by electrical contractor at the time of bill checking.
10. Single line diagram should be submitted at branch & one copy should be attached near db / main panel.
11. Shock treatment chart should be past near db / main panel. Stickers should be paste on dbs / main panel.
12. The contractor's presence must be compulsory for shifting / installing of ups , data rack, epabx systems. - must help to bank's vendors like pcs (hardware), ups, datacraft (port switch - software), etc.
13. Vendor has to submit MTC / test reports & Inspection certificate of Company wherever required.
14. **Concealed Work:** The contractor shall give due notice to the Employer/SBI whenever any work is to be covered up or finished up or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such covering, in default whereof the same shall, at the opinion of the Employer/ SBI be either opened up for measurement at the contractor's expenses or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked, the notes of the Employer / SBI shall be accepted as correct and binding on the contractor.

15. All the laborers, electricians etc., involved in work shall be efficient, qualified electrical license holders and well experienced in Electrical installations and allied works. All employees should be under the coverage of P.F./Minimum Wages Act, as per labor laws. All rules and regulations as per the extant guidelines of labor department are to be followed.
16. If necessary, the contractor shall be responsible for Liaison with Electrical Inspectorate and obtaining clearance/inspection certificate from inspectorate.
17. MCCB fault level shall be of minimum 16 ka, whereas fault level for all MCBs shall be of minimum 3 ka.
18. All copper wires & aluminum cables shall be 1.1 kV grade. All copper wires used for wiring shall be FRLS type.
19. All medium voltage equipment shall be earthed by two separate and distinct connections with the earth. In the case of high and extra high voltages, the neutral points shall be earthed by not less than two separate and distinct connections with the earth, each having its own electrode at the generating station or substation.
20. If necessary, any additional cutouts and patching up gaps/holes side by the Electrical fittings/accessories are to be repaired by successful bidder only.
21. In some cases, job to be carried out at working office environment, so successful bidder shall coordinate with Electrical Facility Management Team on site for proper permissions and non-hindrance of SBI regular functions.

## TECHNICAL SPECIFICATIONS

Unless otherwise mentioned in item description / bill of quantities and / or instructed by SBI Engineer following specifications shall be adopted. All works to be carried as per detailed execution drawings and instructions of SBI/Engineer in-charge. Sizes mentioned hereunder or elsewhere in these tender documents are finished sizes and center to center distance is the maximum permissible distance.

### INTERNAL ELECTRIFICATION

#### 1.0 Scope:

This specification is intended to cover the requirements of supply, installation, testing and commissioning of electrical wiring installation and other accessories required for its satisfactory operation. This covers the essential requirements or precautions regarding wiring installations for ensuring satisfactory and reliable service.

#### 2.0 Standards:

The Electrical wiring installations and other accessories shall comply with latest IS: 732 - 1989 and National Electrical code – 1985.

#### 3. Construction

Wall mounted switch boards shall be installed such that the bottom is at a minimum height of 1.35 m above finished floor level wherever applicable, as indicated in the drawing. Equipment which is on the front of a switch board shall be so arranged that inadvertent personnel contact with live parts is unlikely during the manipulation of switches, changing of fuses or similar operation. In every case in which switches and fuses are fitted on the same pole, these fuses, shall be so arranged that the fuses are not live when their respective switches are in 'OFF' position. No fuses other than fuses in instrument circuit shall be fixed on the back or behind a switch board panel or frame.

#### 4. Capacity of circuit:

Lighting Circuits shall not have more than a total of ten points of fans, 5A socket outlets and light points and its total load shall not exceed 800 watts. Lights, fans, and 5A socket outlets can be wired on a single common circuit. If fan circuit is drawn separately, circuit shall not be used more than eight points and load shall not exceed more than 800 watts. In the circuit, the neutral and earth wires can be looped up to 10points. From distribution boards Neutral & Earth wires shall be run for every circuit.

The power circuits shall not have more than two outlets per circuit if load to be fed by each outlet is less than 1KW, and if load is more than 2KW, each outlet shall be connected to a separate circuit.

**Switches:** All switches shall be placed in the live conductor of the circuit and no single pole switch or fuse shall be inserted in the earth or earthed neutral conductor of the circuits. Single pole switches (other than for multiple control) carrying not more than 15amperes may be of the piano flush type and the switch shall be 'ON' When the knob is down.

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

**Lamps:** All incandescent lamps, unless otherwise specified shall be hung at a height of not less than 2.5 m above the finished floor level.

**Ceiling rose:** a) A ceiling rose or any other similar attachment shall not be used on circuit, the voltage of which normally exceeds 250 volts. A ceiling rose shall not embody fuse terminals as an integral part of it. Every socket outlet shall be controlled by a switch. The switch controlling the socket shall be on the 'live' side of side line. 5 Amps and 15 Amps socket-outlet shall normally be fixed at any convenient place 60 cm above the floor level or near such level as indicated in drawing. 15 Amps socket outlets in kitchen shall be fixed at convenient place 23cm above the working platform. In a room containing a fixed bath or shower, there shall be no socket outlet and there shall be no provision for connecting a portable appliance.

#### **5 Recessed conduit wiring system**

**a) Making of chase:** The chase in the wall shall neatly be made and shall be of suitable dimension to permit the conduit to be fixed in the manner desired by the Engineer-in charge. In the case of buildings under construction, chases shall be provided in the wall, ceiling, etc. at the time of their construction and shall be filled up neatly after erection of conduit and brought to the original finish of the wall.

**b) Fixing of conduit in chase:** The conduit shall be fixed by means of staples or by means of saddles not more than 600 mm apart. Fixing of standard bends or elbows shall be avoided as far as practicable and all curves maintained by bending the conduit pipe itself with a long radius which will permit easy drawing-in of conductors. All the threaded joints of rigid steel conduits shall be treated with approved preservative compound to ensure protection against rust.

**c) Inspection boxes:** To permit periodical inspection and to facilitate replacement of wires, suitable inspection boxes shall be provided at convenient locations. They shall be mounted in flush with the wall. The minimum size of inspection boxes shall be 75 x 75 mm. Suitable ventilating holes shall be provided in the inspection box covers.

**d) Types of accessories to be used:** All outlets, such as switches and sockets, may be either of flush mounting type or of surface mounting type. The switches and other outlets shall be mounted on such boxes. The metal box shall be efficiently earthed with the earth continuity wire run along the conduit.

When crossing through expansion joints in buildings, the conduit sections across the joint may be through flexible copper bellows of the same size as PVC conduit. The Number of wires that can be drawn through a conduit shall be strictly as per IS 732 and as mentioned in Drawings.

#### **6. MS Conduits:**

MS conduit shall be black enameled and of thickness not less than 16SWG and of size minimum 19 mm dia. The Conduit shall conform to IS 9537/ Part II Bunching of cables: Separate conduits shall be used for bunching of conductors of AC supply and DC supply for lighting and small power outlet circuits. All outlets of conduit systems shall be properly drained and ventilated, but in such a manner so as to prevent the entry of insects etc. as far as possible. Bends in conduit: Wherever necessary, bends or diversions may be achieved by bending the conduits or by employing normal bends, inspection bends, inspection boxes, elbows or similar fittings. In case of plain conduit, heat may be used to soften the conduit for bending and forming joints. Positioning of conduit in close proximity to hot surfaces should be avoided.

#### **7. TESTING OF WIRING:**

The following tests shall be carried out on all types of wiring on completion of the work and before energizing the installation:

- i) Insulation resistance test,

- ii) Electrical continuity test,
- iii) Earth continuity test,
- iv) Earth electrode resistance test,
- v) Switch polarity test.

**i) Insulation Resistance test:**

The insulation resistance shall be measured by using 500 v megger between the following points. Phase and neutral conductor with all fuses in position and all switches in closed condition and main switch in OFF position with lamps and other devices removed. Between earth and whole system of conductors with all fuses in place, all switches closed and all lamps in position.

Between all conductors connected to one phase of the supply of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one mega ohm.

The insulation resistance in mega ohm as obtained by each of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one mega ohm.

**(ii) Electrical continuity test:**

Each and every circuit shall be tested for electrical continuity by using a multimeter.

**(iii) Earth continuity test:**

The earth continuity conductor including metal conduit shall be tested for electrical continuity and the resistance of the same along with the earthing lead measured from the connection with the earth electrode to any point in the earth continuity conductor in the complete installation shall not exceed one ohm.

**iv) Earth electrode resistance test:**

The earth electrode resistance shall be tested as specified in section

**(v).Switch polarity test:**

Test shall be made to verify that all switches in every circuit have been fitted in the same conductor throughout and such conductor shall be marked for connection to the phase conductor.

**8 Distribution Boards:**

All the distribution boards shall be with MCBs as described in the respective schedule. The distribution boards shall be controlled by a switch fuse, miniature circuit breaker or an isolator as described in the respective schedule. Each outgoing circuit shall be provided either with MCB or a fuse on the phase. The neutral shall be connected to a common link and be capable of being disconnected individually for testing purposes. The distribution boards shall be located as indicated in the respective electrical working drawings and as directed by Engineer - in - charge. The distribution boards shall be fixed on wall in the niche provided and marked with the details of circuits, source of supply, size of incoming wires Etc., All marking shall be clear and legible.

The total load of the consuming devices shall be evenly distributed between the number of ways of distribution board. The consuming devices circuit shall be connected to distribution board in proper sequence, so as to avoid unnecessary crossing of wires. Cables shall be connected to a terminal only by crimped lugs. Cables shall be rigidly fixed in such a manner that a clearance of at least 2.5cm is maintained between conductors of opposite polarity or phase and between the conductors and any material other than insulating material. The incoming and outgoing cables shall be neatly bunched.

## **9. MOUNTING HEIGHTS:**

The Mounting heights of various fixtures shall be as specified in the Drawings.

## **5.0 Switch Fuse Units:**

### **5.1 General:**

The switch fuse units shall be of the load break, heavy duty, cubicle type conforming to the requirements IS and of AC 23 duty. The switch fuse units shall be capable of withstanding the thermal and electromagnetic stresses caused by short circuits for the time of operation of the associated fuse links.

The switch fuse units shall be double break and have quick make break mechanism, designed to ensure positive operation. All switch fuse contacts shall be silver plated at the current transfer surfaces. The unit shall be provided with a front operating handle. The ON and OFF positions of the switch handle shall be clearly marked.

### **5.2 Interlocks and Safety:**

Interlocks shall be provided so as to prevent opening of the unit door when the switch is in the ON position and also to prevent closing of the switch with the door not properly secured.

### **5.3 HRC Fuses:**

The switch fuse units shall be fitted with High rupturing capacity cartridge fuse links with ISI marking for a rupturing capacity of not less than 80 KA at 415 volts. The fuse links shall be mounted in a draw out carriage, thus ensuring positive isolation of contacts during fuse replacements.

## **6.0 Current Transformers.**

Current transformers shall comply with the requirements of relevant latest amendment IS. They shall have ratios, outputs and accuracy as specified in the schedule.

## **7.0 Indicating / Integrating Meters:**

All indicating instruments shall be of flush mounted industrial pattern conforming to the relevant latest amended IS. The instrument shall have non reflecting bezels, clearly, divided and indelibly marked scales, and shall be provided with zero adjusting devices in the front. Integrating instruments shall be of flush mounted switch board pattern complying with the requirements of relevant latest IS.

**8.0 Relays:** Circuit breakers shall be provided with integrally mounted relays as specified in the schedule. The relay shall have a set of three phase characteristics, which shall be adjustable over a wide range, to provide discrimination between a multiplicity of devices. The relay shall be able to provide over current and earth fault protection. Also UV and Shunt trip Relays are to be provided.

**9.0 Control switches/Selector switches:** Control switches/Selector switches shall be of the heavy duty rotary type, with plates clearly marked to show the operating position. They shall be of semi-flush mounted type with only the front plate and the operating handle projected. Circuit breakers control switches shall be of the spring return to neutral type.

## **10.0 Indicating lamps and push buttons:**

Indicating lamps shall be of the LED type of low watt consumption, provided with series resistors where necessary and with translucent lamp covers. Bulbs and lenses shall be easily replaceable from the front. Push buttons shall be of the momentary contact, push to actuate type fitted with self-reset contacts and provided with plates marked with its junctions.



**11.0 Cable terminations :**

Cable entries and terminals shall be provided in the switch board to suit the number, type and size of aluminum conductor power cables and copper conductor control cables as indicated in the schematic diagram. Provision shall be made for top or bottom entry of cables as required. Generous size of cabling chambers shall be provided, with the position of cable glands and terminals such that cables can be easily and safely terminated. Barriers or shrouds shall be provided to permit safe working at the terminals of one circuit without accidentally touching that of another live circuit. Cable riser shall be adequately supported to withstand the effects of rated short circuit currents without damage and without causing secondary faults. Cable sockets shall be of copper and of the crimping type/soldering as required.

**12.0 Control wiring :**

All control wiring shall be carried out with 1100/650 V grade single core Copper cable conforming to relevant IS having stranded copper conductors of minimum 2.5 sq.mm. section for CT Wiring and 1.5sq.mm for Control/indicating Instruments.

Wiring shall be neatly bunched, adequately supported and properly routed to allow easy access and maintenance. Wires shall be identified by numbered ferrules at each end. The ferrules shall be of the ring type of non-deteriorating material. They shall be firmly located on each wire so as to prevent free movement. All control circuit fuses shall be mounted in front of the panel and shall be easily accessible.

**13.0 Terminal blocks and labels :**

Terminal block shall be of 500 volts grade of the stud type. Insulating barriers shall be provided between adjacent terminals. Terminal block shall have minimum current rating of 10 amps and shall be shrouded. Provisions shall be made for label inscriptions.

Labels shall be made of anodized aluminum, with white engraving on black background. They shall be properly secured with fasteners. Danger plate of size and descriptions as recommended in the relevant IS shall be provided on the PCC.

**15.0 Drawings :**After the award of the contract the contractors shall submit three copies of the following drawings for approval of the Department.

- i) Outline dimensional drawing of the PCC showing the general arrangement indicating the following :
  - a) Bus bar clearances;
  - b) power and control cable entry points;
  - c) Configuration of bus bars;
  - d) Details of support insulation's and spacings;
  - e) Outgoing power cable termination arrangements.
- ii) Single line diagram of power control centre showing Protection, Metering etc.
- iii) Cubicle wiring diagram.
- iv) List of accessories with Ratings & makes / Models

**16.0 Installation Testing and commissioning :**

The power control centre shall be installed over the cable trench/cable pit using suitable size of MS channel including grouting of the channel with necessary bolts and nuts. Proper earthing of PCC shall be done using two independent copper/GI strip of sizes as indicated in the schedule. Each power control centre and components shall be subjected to standard routine tests as per applicable clauses of relevant standards.

The channel shall be painted with one coat of red oxide primer and two coats of anti corrosive enamel paint of

proper shade as directed by the Engineer-in-charge. The per-commissioning tests as required shall be done and the PCC shall be commissioned.

## **LAYING OF CABLES**

### **1.0 Scope :**

This specification is intended to cover the requirements of installation and energizing of PVC/XLPE/PILCDSTA power cables including jointing of cables.

### **2.0 Standards :**

The power cable and its fixing accessories shall comply with the latest relevant Indian Standards and National Electrical Code.

### **3.0 Laying of Cables :**

#### **3.1 General :**

3.1.1 Before the commencement of cable laying, it shall be ensured by the Engineer-in- Charge that only ISI marked cables are used. It shall be the responsibility of the contractor to check the soundness and correctness of the size of the cable while taking delivery of the cable from stores. Any defect noticed shall be brought to the notice of the issuing authorities immediately. If any defects is noticed after the cable is laid or during the process of laying, it shall be brought to the notice of the Engineer-in-Charge and upon his satisfaction, that the cable is not damaged due to bad handling, it will be the entire responsibility of the contractor to retrieve the cable already laid and return the defective cable to store and take fresh length of the cable from the store and relay the same.

3.1.2 The material such as bricks, sand, cable route markers, RCC slab of best quality as approved by the Engineer-in-Charge only shall be used for cable laying works.

3.1.3 The contractor shall provide all the necessary labour, tools, plants and other requisites at his own cost for carrying out pumping of water and removing of water from trenches, if any, where required.

3.1.4 Installation shall be carried out in a neat, workman like manner by skilled, experienced and competent workman in accordance with standard practices.

3.1.5 While laying the cable care shall be taken to avoid formation of kinks and also damage to the cable. In the case of cable bends, it shall not have bent radius lesser than 20 times the overall diameter of the cable.

3.1.6 A cable loop of about five meters length and as directed by the Engineer-in-Charge shall be provided at the following locations.

- a) Near the termination points
- b) Near to the straight through joint

3.1.7 The method of cable laying and routing of cables, shall in every case be as directed by the Engineer-in-Charge / Architect.

3.1.8 Whenever cable passes through Hume pipes/GI pipes embedded across the wall in a building, both the ends of the pipe shall be suitably sealed.

3.1.9 Identification tags indicating the size of the cable and feeder designation shall be securely attached at both ends of the cable. Such tags shall also be attached to the cable at intervals of 50 Mtrs. The materials of the

tag shall be of either 12 SWG GI sheet. In case of plastic, the details have to be engraved and in case of GI sheet, the details should be punched. Cable route markers shall be provided at the intervals of 200 M with a minimum of one number route marker. The details of the route makers shall be as per the drawing. At the locations of straight through joints, necessary joint-markers shall be provided.

3.1.10 When cable runs vertically, it shall be clamped on mild steel flats or angle iron fixed on walls and are spaced at such intervals as to prevent buckling of the cables. All steel work shall be painted with a coat of red oxide and thereafter finished with suitable anti corrosive paints.

### **3.2 Cable laid in ground :**

3.2.1. All MV cables (up to 1.1 KV) shall be laid at a minimum depth of 0.75 M & HT cables (1.1 KV to 11 KV) shall be laid at a depth of 1.0 M when laid in ground. When cable pass through roads, nallahs etc. they must be protected by either Hume pipe or GI pipe of suitable dimensions.

3.2.2. Excavations of trenches shall be carried out as indicated in the drawing. The width of the trench at the bottom shall be 0.4 M for one cable. In case the total number of cables laid in trenches is more than one, then the width shall be such that the spacing between the cables is maintained as shown in the drawing. Before the cable is laid in the trench the bottom of the trench shall be cleared from stones and other sharp materials and filled with sand layers of 75 mm, as shown in the drawing.

3.2.3. While removing the cable from the drum, it shall be ensured that the cable drum is supported on suitable jacks and the drum is rotated to unwind the cable from the drum. The cable should never be pulled while unwinding from the drum. It shall be ensured that the cables are run over the wooden rollers placed in the trench at intervals not exceeding 2 M.

3.2.4. After placing the cables in the trench shall be filled in layers ensuring that each layer is well rammed by spraying water and consolidated. The extra earth shall be removed from the place of trench and deposited at a place as directed by the Engineer-in- Charge/Architect.

3.2.5. The HT cables shall be provided with RCC slabs (marked HT cable) on top as protection.

### **3.3 Cables laid in built up trench :**

3.3.1. Before the commencement of cable laying the cable trench shall be drained properly. Cable shall be laid as explained in item 3.2.

3.3.2. Cable shall be properly clamped to the cable supports , which are provided in the cable trench. The method of clamping shall suit the size of the cable and the cable supports, which are provided in the cable trench.

3.3.3. The method of clamping shall suit the size of the cable and the cable supports, as directed by the Engineer-in-Charge.

3.3.4. Care shall be taken while removing and replacing the trench cover slab. It is the responsibility of the contractor to make good any damaged trench covers.

### **3.4. Cable terminations and straight through joints :**

3.4.1. All cable jointing materials such as straight through joint boxes, cable compound, cable lugs, insulation tapes etc. shall be of best quality and as approved by the Engineer-in- Charge / SBI.

3.4.2. Cable glands for strip / armored cables shall include a suitable Armour clamp for receiving and securely attaching the armoring of the cable in a manner such that no movement of the Armour occurs when the

assembly is subjected to tension forces. The cable gland shall not impose on the armoring, a bending radius not less than the diameter of the cable. The clamping ring shall be solid and of adequate strength. Provision shall be made for attachment of an external earthing bond between the metallic covering of the cable and the metallic structure of the apparatus to which the cable box is attached.

### **3.5 Sealing boxes :**

3.5.1 A sealing box, irrespective of the class of insulation of the cable for which it is intended, shall be so designed that it may be filled with compound after connecting the cable specially in flame proof/hazardous areas.

3.5.2 All parts and connection for attaching the armoring, wiping or clamping the metallic sheath in a sealing box, shall be easily accessible. This may be achieved by splitting the box or by providing a suitable cover or other such means.

3.5.3 The joints in the box shall prevent leakage of the compound.

3.5.4 Provision shall be made to ensure that the cores of the cable are efficiently sealed to prevent moisture penetrating along the strands or the cable conductors.

3.5.5 A sealing box intended to be attached directly to the apparatus shall be designed such that the box together with the connected cable may be detached from the apparatus without disturbing the sealing compound. Cable sealing and dividing boxes intended for use in the flame proof areas shall comply additionally with the relevant requirements of IS:2148-1968.

### **4.0 Testing**

Once cable is laid, following tests shall be conducted in the presence of Engineer-in- Charge, before energizing the cable:

- i) Insulation resistance test (Sectional and Overall).
- ii) Sheathing continuity test.
- iii) Continuity and conductor resistance test.
- iv) Earth test.
- v) High voltage test.

Tests conducted shall be as per Indian Standards and National Electrical Code.

### **EARTHING**

#### **1.0 SCOPE:**

This specification is intended to cover the requirements of supply, installation, testing and commissioning of

- a) Pipe earthing
- b) Plate earthing
- c) Strip earthing

#### **2.0 STANDARDS:**

Earthing installations shall conform to the Indian Electricity Rules - 1956, as amended from time to time and IS 3043-1989 "code of practice for earthing", with latest amendments.

#### **3.0 Earth electrode arrangement :**

##### **3.1 Pipe electrode :**

3.1.1 Electrode shall be made of CI pipe having a clean surface and not covered with paint, enamel or poorly conducting material. Galvanized pipe shall not be smaller than 100 mm ID. Earthing with pipe electrode shall be done as per the details indicated in IS : 3043/87 .

3.1.2 Electrodes shall be embedded below permanent moisture level.

3.1.3 The length of pipe electrodes shall not be less than 2.5 m. if rock is encountered, pipes shall be driven to a depth of not less than 2.5 m with suitable inclination. Pipe shall be in one piece and deeply driven.

3.1.4 To reduce the depth of burial of an electrode without increasing the resistance, a number of rods or pipes may have to be connected together in parallel. The distance between two electrodes in such a case shall not be less than twice the length of the electrode. The earthing lead shall be connected by means of a through bolt, nuts and washers and cable socket.

**3.2 Plate electrode** :For plate electrodes, minimum dimensions of the electrode shall be as under.

3.2.1 GI plate electrode : 600 x 600 x 6 mm thick.

3.2.2 Copper plate electrode : 600 x 600 x 3.15 mm thick

3.2.3 The electrode shall be buried in ground, with its faces vertical and top not less than 2.5 M from the surface of the ground.

3.2.4 Earthing using plate electrode shall be done as per details, indicated in drawing.

3.2.5 Plate electrodes shall have a galvanized iron water pipe, buried vertically and adjacent to the electrode. One end of pipe shall be atleast 5 cm above the surface of the ground and need not be more than 10 cm. The internal diameter of the pipe shall be atleast 19 mm. The length of pipe under the earth's surface shall be such that it shall be able to reach the center of the plate. The earthing lead shall be securely bolted the plate with two bolts, nuts, check nuts and washers.

**3.3. Strip or conductor electrodes :**

3.3.1. Strip electrode shall not be smaller than 25 x 1.6 mm, if of copper and 25 x 3 mm, if of galvanized iron and steel. If round conductors are used as earth electrodes, their cross sectional area shall not be smaller than 3 sq.mm , if of copper and 6 sq.mm. if galvanized iron and steel.

3.3.2. Conductor shall be buried in trenches not less than 0.5 m deep.

**4.0 MISCELLANEOUS:**

- i) All materials used for connecting the earth lead with electrode shall be of GI in case of GI pipe and GI plate electrodes, and of tinned brass in case of copper plate electrode. The earthing lead shall be securely connected at the other end to the main board.
- ii) The earthing lead from electrode onwards shall be suitably protected against mechanical injury by routing the earth wire / strip through a suitable size of GI pipe.
- iv) All materials, fittings etc. used in earthing shall conform to Indian standard specifications wherever they exist. In the case of materials for which Indian standard specifications do not exist, such materials shall be approved by the Engineer-in-Charge.
- v) The earth electrode shall be kept free from paint, enamel and grease.
- vi) It shall be ensured that similar materials for respective earth electrodes and earth conductors are used. Earth electrode shall not be installed in proximity to a metal fence.

## FORM OF AGREEMENT

ARTICLES of AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_ year 2018 between the **State Bank of India, RBO, DHARMAVARAM** (Hereinafter referred to as the “Employer/Owner/client” which expression shall, unless excluded by or repugnant to the context, includes its successors and assigns) of the ONE PART and \_\_\_\_\_ of \_\_\_\_\_ (Hereinafter referred to as “Contractor” unless excluded by or repugnant to the context, includes its successors and assigns) of the OTHER PART.

WHEREAS the Employer intends to carry out **ELECTRICAL INSTALLATION WORKS AT NEW PREMISES OF RACC AND MINI RACPC AT DHARMAVARAM** and shall herein after referred to as “Project”.

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

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

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

AND WHEREAS the Employer has accordingly issued the work order (NO. \_\_\_\_\_ dt. \_\_\_\_\_) to the contractor subject to his furnishing the requisite Security Deposit.

AND WHEREAS the Contractor has accepted the aforesaid Work Order vide his letter of acceptance NO. \_\_\_\_\_ dt. \_\_\_\_\_ and has also deposited with the Employer a sum of Rs. \_\_\_\_\_ which with the Earnest Money of RS. \_\_\_\_\_ forms the requisite Security Deposit @ 2 % of the accepted Tender Value of Rs. \_\_\_\_\_.

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

### 1) Contract documents

The following documents shall constitute the Contract Documents.

- i. This Article of Agreement.
- ii. Tender Document submitted by the Contractor including the “said conditions”, N.I.T and Schedule of quantity.
- iii. All correspondence between the Employer and the Contractor from the date of issue of N.I.T and the date of issue of work order.
- iv. Work order No. \_\_\_\_\_ dt. \_\_\_\_\_

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

*Signature of Bidder*

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Employer and described in the said Specifications and the said Schedule of Quantities.

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

4) As mentioned in Article 1 above, the “**said conditions**” shall be read and be treated as forming part of this agreement and parties hereto will respectively be bound thereby and to abide by and submit themselves to the conditions and stipulations and perform the same on their parts to be respectively observed and preferred.

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

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

Signed and delivered for and on behalf of

State Bank of India, Shri. \_\_\_\_\_ its duly authorized official, In the presence of –  
1. (Name and Address)

2. (Name and Address)

Signed and delivered for and on behalf of

The Contractor \_\_\_\_\_ by Shri \_\_\_\_\_ his duly authorized official, in the presence of –  
1. (Name and Address)

2. (Name and Address)

READ, UNDERSTOOD AND ACCEPTED

**SIGNATURE OF THE CONTRACTOR WITH SEAL**

DATE

## DECLARATION

**The Regional Manager,**  
State Bank of India,  
RBO, DHARMAVARAM  
DHARMAVARAM.

I/We have inspected the site **NEW PREMISES OF RACC AND MINI RACPC AT DHARMAVARAM** and I/We have made me/ us fully acquainted with the local conditions in and around the sites of works and Lay out drawings of works, drawings of each items etc. complete.

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

We accept all the terms and conditions of tender documents. We will abide by the technical specification mentioned in the tender. We here by undertake to use only specified material/ make as per the tender schedule. I/ We hereby declare that, in particular during execution of all works at site; it will be my/ our sole responsibility to strictly adhere to/ meticulously follow the General Specification, Approved manufacturers/ natural source of materials, Technical Specifications of schedule of quantities, all drawings of layout and items.

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

I/ We hereby declare that I/ We shall obtain necessary drawings of items from employer in time and also shall uniformly maintain such progress as may be directed by the employer to ensure completion of same within the target date/ time as mentioned in the tender document.

**Date:**

**Signature and seal of Contractor/ Tenderer**

**Witness:**

- 1.
- 2.

*Signature of Bidder*

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**PROFORMA FOR  
RUNNING A/C BILL**

- i. Name of Contractor/ Agency :
- ii. Name of Work :
- iii. Sr. No. of this Bill:
- iv. No. & Date of previous Bill :
- v. Reference to Agreement No. :
- vi. Date of Written order to commence :
- vii. Date of Completion as per Agreement :

S.No	Item description	Unit	Rate(Rs.)	As per Tender		Up to Previous R.A. Bill		Up to date (Gross)		Present Bill		Remarks
				Qty	Amount	Qty	Amount	Qty	Amount	Qty	Amount	
1	2	3	4	5	6	7	8	9	10	11	12	13

**Note:**

1. If part rate is allowed for any items, it should be indicated with reasons for allowing such a rate. Net Value since previous bill.
2. If ad-hoc payment is made, it should be mentioned specifically.

**MEMORANDUM FOR PAYMENT**

**BILL OF M/S.** \_\_\_\_\_

**FOR** \_\_\_\_\_

**R/A BILL NO.**

- |  |         |
|--|---------|
| 1. Total value of work done since previous bill (A)  | Rs..... |
| 2. Total amount of secured advance due since Previous Bill (B)   | Rs..... |
| 3. Total amount due since Previous Bill (C) (A+B)  | Rs..... |
| 4. PVA on account of declaration in price of Steel, Cement and other materials and labour as detailed in separate statements enclosed. | Rs..... |
| 5. Total amount due to the Contractor  | Rs..... |

**OBJECTIONS**

- |   |         |
|---|---------|
| 6. i) Secured Advance paid in the previous R/A  | Rs..... |
| ii) Retention money on value of works as per accepted tenders up to date amount   | Rs..... |
| Less already recovered  | Rs..... |
| Balance to be recovered   | Rs..... |
| iii) Mobilization Advance, if any   | Rs..... |
| (a) Outstanding amount(principal+interest) as on date   | Rs..... |
| (b) To be recovered in this bill  | Rs..... |
| (c) Any other Departmental materials cost to be recovered as per contract, if any   | Rs..... |
| iv) Any other Departmental service charges to be recovered if any, as per contract (water, power etc.) enclose statement. | Rs..... |

*Signature of Bidder*

The bill amount to Rs. ----- (both figures and words) has been scrutinized by us after due checking of the measurements of work as required and is recommended for payment.

Date:-----

Signature of Architects  
with Seal

The bill amount to Rs.-----certified by Architects has been scrutinized by me after due test checking of measurements of works as required and is recommended for payment for an amount of Rs.....

Date : -----

Signature of Banks Engineer

**STATUTORY DEDUCTION:**

i) Total Amount due (E)	Rs. -----
ii) Less I.T. Payable	Rs. -----
iii) Less S.T. Payable	Rs. -----
iv) Net Payable	Rs. -----

This figures given in the Memorandum for payable has been verified and bill passed for payment -----  
----- (in words and figures)

Date: -----

Signature of the Regional Manager

**LIST OF APPROVED MAKES OF MATERIALS**

<b>S. No.</b>	<b>Materials Description</b>
1	<b>Switches/Sockets</b> : Legrand –Mosaic / MK-wrap around/ Anchor -Woods /Schneider-Clipsal
2	<b>Copper Conductor wires</b> : Finolex /RR Cable/Havells/ Power flex/ Poly Cab/KEI
3	<b>PVC conduits, Casing , Capping &amp; Accessories</b> : Precision / Sudhakar/ Avonplast/ FINOLEX
4	<b>Metal clad Sockets</b> : Legrand /L&T- Hager /ABB/SIEMENS/ Schneider
5	<b>MCBs /MCB Distribution boards (Powder coated Only)</b> : ABB/Siemens/ Legrand / Schneider /L&T/ Havells
6	<b>MCCBs/Switchgear</b> : GE Power /Hager(Compact) /L&T/ ABB/Schneider/ Legrand
7	<b>Underground Cables</b> : CCI /Nicco /Havells/ Universal/ Poly Cab
8	<b>Cable Glands</b> : HMI /Comet/ Cosmos/Dowells (Biller India)/ Hax Brass
9	<b>Capacitor Bank</b> : Epcos /Neptune/ Tibcon
10	<b>Cable Lugs</b> : Dowell's / 3D
11	<b>MV Panels (PCCs)</b> : Manufacturers with CPRI Test Certificate
12	<b>Measuring Instruments</b> : Conzerv/ CMS/ EI measure/IME/ L&T/ Schneider Electric
13	<b>Indication Lamps LED</b> :Schneider / Vaishno / Binay
14	<b>Telephone Wires</b> : Lapp / Delton / Poly cab/ Finolex/
15	<b>Resin cast CTs</b> : AE / Kappa
16	<b>Ceiling Fans, Wall mounted fans &amp; Exhaust Fans</b> : Havells/Bajaj/ CG/Orient/ USHA
17	<b>Selector Switches</b> : Vaishno / Salzer / Kaycee
18	<b>Light Fixtures (LED)</b> : Philips / Bajaj/ GE/ Havells/ CG/Wipro/Eveready

**Electrical accessories / LED Light fixtures / Luminaires to be selected by the Engineer in charge out of three samples submitted by the successful bidder. Prompting to use specific unauthorized brand material is strictly prohibited.**

**LIST OF I.S.CODES FOR  
INTERNAL ELECTRIFICATION INSTALLATIONS**

01.	EXTERNAL ELECTRIFICATION wiring installation (system voltage not exceeding 650V)	IS 732 – 1989
02.	Graphical symbols used in Electro-technology	IS 2032-1969 art-XI-Electrical Installation buildings
03.	Fire safety of buildings (General) Electrical Installation	IS 1646-1961
04.	3 pin plugs and sockets	IS 1293
05.	Earthing.	IS 3043-1966
06.	Rigid steel conduits for electrical wiring	IS 9537-PII-1989
07.	Fittings for electrical wiring	IS 2667-1964
08.	Flexible steel conduits electrical wiring	IS 3430-1966
09.	Accessories for rigid steel conduit insulated cables	IS 3837-1966
10.	General and safety requirements for electric lighting fittings	IS 1913-1969
11.	Protecting of buildings and allied structures against lightning	IS 2309-1967
12.	Bus bar ratings	IS 8084-1976
13.	On load change over switches	IS 4064-1978

**DECLARATION OF WORKS IN HAND IN AMARAVATI CIRCLE**

Sl. No.	Name of the Work & Branch	Work order no. & date	Name of the AO	Present status

Seal and signature of the contractor