PROJECT:

PROPOSED ELECTRICAL WORK

FOR

BANK OF MAHARASHTRA

AΤ

SANGAMNER BRANCH, DIST. AHMEDNAGAR .

CLIENT:

A.G.M

BANK OF MAHARASHTRA,

'GURUKUL' LALTAKI ROAD, APPU CHOUCK, AHMEDNAGAR - 414001. AHMEDNAGAR.

	TECHNICAL BID (ENVELOPE NO 2)					
1	NAME OF THE CONTRACTOR					
2	ADDRESS					
3	SIGNATURE					
4	DATE OF ISSUE					
6	DATE OF OPENING	To be conveyed to all contractors later.				
7	TENDER COST	Rs 1180/- DD TO TARE AND				
		ASSOCIATES (NON-REFUNDABLE)				
8	DATE OF ISSUE OF TENDER	. 30/11/2018.				
9	DATE OF SUBMITTING TENDER	13/12/2018				
10	PERIOD OF WORK	39 DAYS				
11	FORMAT FOR SUBMISSION OF	Tender shall be submitted in three envelope				
	TENDER	system:				
		1 st Earnest money DD				
		2 nd Envelope to contain Technical Bid papers (PART 1)				
		3 rd envelope to contain Financial Bid Papers (PART 2)				
		Financial bid shall be opened only if technical				
		papers are in order.				
TAF	RE AND ASSOCIATES					
	FAL PROJECT SOLUTIONS					
		naru Garden, Shalimar, Nashik - 422001				
	.: (0253) 2502727 / 2507272, M:98230820					
	ail . : mmtare@yahoo.com					

2) <u>TENDER NOTICE</u>

Place:- AHEMDNAGAR Date 30.11.2018.

To,

The Zonal Manager, Bank of Maharashtra, Ahmednagar Zonal Office, Gurukul Building, Lal taki raod, Ahmednagar – 414001.

Dear Sir,

Having examined the drawings, specifications, designs and schedule of quotation relating to the works specified in the memorandum herein after set out and having visited and examined the site of the works specified in the said memorandum at the rates mentioned in the attached schedule of quantities and in accordance in all respects with the specifications, designs, drawing and instructions in writing referred to in conditions of tender, the Articles of Agreement, Special Conditions. Schedule of Quantities and Conditions of Contract and with such materials as are provided for by and in all other respects in accordance with such condition of contract and with such materials as are provided with such conditions so far as they may be applicable.

MEMORANDUM

1	Description of works	PROPOSED ELECTRICAL WORK FOR SANGAMNER BRANCH AT AHEMDNAGAR DISTICT FOR BANNK OF
		MAHARASHTRA.
2	Earnest Money	5000/- paid by D.D on any Nationalized Bank, in favor of Bank of Maharashtra, payable at Ahmednagar.
3	Percentage if any deducted from bill	5%
4	Time allowed for completion of the works	39Days.

- 2. Should this tender be accepted, I/we hereby agree to abide by the fulfill the terms and provision of the said conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to the Bank of Maharashtra the amount mentioned in the said conditions.
- 3. I/We have deposited a sum of 1% of quoted amount as earnest money with the Bank of Maharashtra which amount is not to bear any interest. Should I/We fail to execute the Contract when called upon to do so. I/we do hereby agree that this sum, shall be forfeited by me/us to the Bank of Maharashtra.

 (Mandatory information required for Prequalification of the bidder for Proposed ELECTRICALS WORK FOR SANGAMNER BARANCH AT AHEMDNAGAR .) Important: Please type or handwrite in capital letters. Attach copies of the supporting documents. Name of the Bidder : 	tion is as follows:-					
ELECTRICALS WORK FOR SANGAMNER BARANCH AT AHEMDNAGAR .) Important: 1. Please type or handwrite in capital letters. 2. Attach copies of the supporting documents. Name of the Bidder :						
Important:1.Please type or handwrite in capital letters.2.Attach copies of the supporting documents. Name of the Bidder :	•					
2. Attach copies of the supporting documents. Name of the Bidder :						
Name of the Bidder :	Please type or handwrite in capital letters.					
	Attach copies of the supporting documents.					
1 1 1	Name of the Bidder :					
email address :	email address :					
Telephone number office :	Telephone number office :					
Telephone number office :						
Fax no. :	Fax no. :					
Address 1 :	Address 1 :					
Address 2 :	Address 2 :					
and:	and:					
Pin code :	Pin code :					
Year of Establishment :	Year of Establishment :					
Status of the Firm : Proprietary/Partnership/Pvt. Ltd./Pub. Ltd.						
Name and address of the Bankers -1 :	address of the Bankers – 1 :					
Name and address of the Bankers -2 :	address of the Bankers – 2 :					
Name and address of the Bankers -3 :	address of the Bankers – 3 :					
Registration number and date with Registrar	ber and date with Registrar					
of Companies/Firms :	of Companies/Firms :					
PAN Card Number :	PAN Card Number :					
Sales Tax Number :	Sales Tax Number :					
Request copies of the Balance sheet :	copies of the Balance sheet :					
Current solvency certificate from your Banker Attach copy.	certificate from your Banker Attach copy.					
for not less than Rs. Five Lacs :	not less than Rs. Five Lacs :					
Empanelment with the other	impanelment with the other					
Companies/PSUs	1 .					
Field of activities :	Field of activities :					
Main Activity :	5					
Value of the total work done till date :						
List particulars of minimum 10 successfully	•					
completed works during last Seven years	· ·					
amounting to Rs. Five lacs or more :	g to Rs. Five lacs or more :					

List Number of Technical staff working in the organization : List number of other staff working in the organization : Have you in past carried out any works for Bank of Maharashtra or its subsidiaries? : Have you been ever disqualified or levied penalty by the Bank in past for non fulfillment of the contractual obligations. If yes, please provide details in brief. : Have you been ever been put on a holiday list or banned by any Public Sector Units? If yes please provide details in brief:

I/We confirm that to the best of our knowledge this information is authentic and accept that any deliberate concealment will amount to disqualification at any stage.

Seal and Signature of the Bidder/s.

Date: Place:

(Signatures and addresses of witnesses)

(ii) INDEX

SR.NO. DESCRIPTION

PAGE

IN ENVELOPE NO 1

- 1) TENDER FEE
- 2) EMD (1% OF QUOTED AMOUNT).

IN ENVELOPE NO 2. : TECHNICAL BID (with supporting documents)

- 01. TENDER NOTICE
- 02. INTRODUCTION
- 03. SPECIAL INSTRUCTION
- 1. LETTER OF OFFER
- 2. FORM OF AGREEMENT
- 3. SPECIAL CONDITIONS
- 4. PREAMBLE TO BOQ
- 5. APPENDIX
- 6. LIST OF APPROVED MATERIALS (ELECTRICALS)
- 7. ELECTRICAL WORK TECHNICAL SPECIFICATIONS
- 8. LIST OF ELECTRICAL STANDARDS
- 9. SAFETY CODE

IN ENVELOPE NO 3 : FINANCIAL BID

10. BILL OF QUANTITIES (ELECTRICALS)11. ELECTRICAL LAYOUT

1) <u>INTRODUCTION</u>

1	Client	BANK OF MAHARASHTRA
2	Consultant / Consultant	TARE AND ASSOCIATESTotal Project Solutions14, First Floor, Above Pathik Hotel, Nr. NeharuGarden, Shalimar, Nashik - 422001TEL: (0253) 2502727 / 2507272, M:9823082027E-mail . : mmtare@yahoo.com
3	Location (Site Address)	Bank of Maharashtra , SANGAMNER BRNACH , AT. SANGAMNER.
4	Scope of work	ELECTRICAL WORK
А	Issue of Tender	ZONAL OFFICE , AHEMADNAGAR.
B	Submission of Tender	Upto 05.30 p.m. at Ahmednagar Zonal Office, Gurukul Building, Lal taki raod, Ahmednagar – 414001.
С	Likely date of opening of Tenders	On the next day
5	Time limit for execution	5Days from the date of award of work
6	Earnest Money Deposit	1% of quoted amount
7	Retention Amount	5% Through Bill
8	Penalty for delay	0.5% per week of part thereof up to maximum of 5%
9	Defect Liability Period	12 months (one full monsoon minimum)
10	Insurance	Contractors all risk policy (CAR policy)
11	Value of Interim Bill (Minimum)	50% of the contract amount

SPECIAL INSTRUCTIONS

Tenderer may specially note the following.

- 01. Rates quoted by the tenderer shall be valid for a period of four months from the date of opening the tender. The rates shall be filled in both in words and in figures. All the rates shall be self sufficient and firm.
- 02. No upward revisions of rate will be accepted after opening the tender.
- 03. If the tenderar fails to accept the order issued at the rate originally quoted by him or at rates negotiated subsequently, as the case may be, the earnest money shall be forfeited.
- 04. The rates at which the work order is finally placed on the successful Tenderer, shall be valid till the completion of the work.
- 05. Time Limit :- The entire work shall be completed within 39 days. If in the opinion of the Employer / Interior designer, the works gets delayed due to causes which the Employer may consider being beyond the control of the contractor, the Employer at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in writing with detail reasons.
- 06. While executing the work the contractors have to ensure that no inconvenience whatsoever is caused to the offices / people functioning in the premises.
- 07. Adequate number of fire extinguishers, first aid boxes, must be provided on the site by the contractor.
- 08. The Bank reserves the right to distribute the work among two or more tenderers.
- 09. Permissible working hours : 9 AM. To 6PM. Or as per convenience of the respective department.
- 10. The work shall be carried out without disturbing Bank's normal functioning.
- 11. For working beyond office hours prior approval shall be obtain from the Security Incharge of the building. The client reserves full right either to accept or reject such request from the Contractors without assigning any reasons whatsoever.
- 12. No worker of the contractor will be allowed to stay overnight at site.
- 13. Bank reserves the right of addition or deletion of any item listed in B.O.Q. or may operate and Q.R.O. item. Also Bank reserves full right either to accept or reject any tender document.
- 14. Quantities in tender are approximate and payment shall be make only as per actual measurements. Excess quantity shall not be executed without written permission amendment by the Bank. In case of upward or downward revision in quantities of items, the rate quoted by the Contractors shall remain firm at all the times.

- 15. Rates quoted by the tenderer shall include GST Taxes, basic cost of material, transport, insurance, sales tax, octroi, Excise duties & other levies, labour over hear profit etc. nothing will be paid extra on any account.
- 16. On completion of the works the contractor shall clear away and remove from the site all constructional plant, surplus, materials, rubbish and temporary works of every kind and leave whole of the site and the works clean and in workman like condition to the satisfaction of Client. No extra payment will be made for this purpose.
- 17. Selected contractor will have to enter into an agreement with the bank as per form of agreement given in the tender within seven days on being issued with the work order for commencement of work.
- 18. Earnest money of successful contractor will be retained by the Bank as Security Deposit. In addition, the successful contractor has to deposit the balance amount of Initial Security Deposit to the Bank within fourteen days of issue work order. E.M.D. of unsuccessful tenderer will be returned after finalization of award of work.
- 19. For any clarification in any item of work. The contractor should get the same from the interior designer before carrying out the work and all items of work should be carried out with the approval of the Bank.
- 20. RETENTION MONEY;
 - A) The retention percentage (i.e. Deduction form interim bill) shall be 5% of the gross value of each interim bill.
 - B) The maximum amount of retention money shall be the balance amount of the Total Security Deposit.
 - C) 50% of the retention amount shall be refunded to the contractor on virtual completion subject to the following :
 - i) Issue of Virtual completion Certificate by the Premises Department.
 - ii) Contractor's removal of his surplus materials, equipment, labour force, temporary sheds / stores etc. from the site (excepting for a small presence required if any for rectification during defect liability period and approved by the Bank)
 - D) The remaining 50% of the amount may be refunded 14 (fourteen) days after the end of defects liability period provided he has satisfactorily carried our all the works and rectified all defects in accordance with the condition of the contract, including site clearance.
- 21. Defect Liability Period : Defects pointed out during the defects liability period of 12 months from the date of virtual completion of work. Will be satisfactorily rectified by the contractor at no extra cost to the Employer with end satisfaction.
- 22. Completion period is 39 days is common for Interior and electrical work . Co-ordination among all agency is to manage with mutual understanding and convenient to all. No extra period will be granted on the basis of non clearance of internal work link.

LETTER OF OFFER

To,

The Zonal Manager, Bank of Maharashtra, Ahmednagar Zonal Office, Gurukul Building, Lal taki raod, Ahmednagar – 414001.

Dear Sir,

SUB : PROPOSED ELECTRICAL WORK AT SANGAMNER BRANCH FOR BANK OF MAHARASHTRA,

Having examined the contract documents, specifications and Bill of Quantities prepared by premises Section. I / We hereby offer to execute the subject work at the respective rates which I / We have quoted for the items in the Bill of Quantities (B.O.Q.) Further, I declare that before quoting the rates. I / We have visited the site and our rates are as per present site condition, Further I / We herewith deposit 1% of quoted amount for the proposed work as Earnest Money for due execution of the works at my / our tendered rates as per the items of Contract. In the event of this tender being accepted. I / we agree to enter into and execute the necessary contract documents as required by you, I am / we are aware that the Bank intends to complete the entire work as covered in the scope of this tender with in a period as mentioned in special conditions of the Contract, after the letter of intent is issued, I/we agree to complete the works within the said period.

As required by you, I / we are returning herewith the documents (in single) duly signed by us at each page in token of our acceptance of the provisions in the documents. Seal :

I / we agree to enter into and execute the necessary contract documents as required by you. Signature, with Name & Full Address:

Tele No :	
Fax No.	
Mobile No.	

FORM OF AGREEMENT

. (hereinafter called "the owner") of one part and

..... of or whose registered office is situated at

.....

..... (hereinafter called : "the Contractor") of the other part.

NOW IS HEREBY AGREED AS FOLLOWS

- 01. For consideration hereinafter mentioned the contractor will upon and subject to the conditions annexed carry out and complete the work shown upon the contract drawings and described by or referred to in the Contract Bills in the said conditions.
- 02. The owner will pay the Contractor the sum of Rupees (hereinafter referred to as "the Contractor Sum") or such other sum as shall become payable, there under at the times and in the manner specified in the said, Conditions.
- 03. The term "The Consultant" in the said Condition shall mean the said Er. Milind Tare, Tare And Associates, Nasik, in the event of his ceasing to be "CONSULTANT" for the purpose of this Contact, such other persons or persons as the owner shall be nominated for that purpose, not being a person to whom the Contractor shall object for reasons considered to be sufficient by the Employer, PROVIDED ALWAYS that no person subsequently appointed to be "Consultant" under this contract shall be entitled, to disregard or overrule any certificate or opinion or decision or approval or instruction given or expressed by earlier "CONSULTANT".
- 04. The said Conditions thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in such Conditions contained.
- 05. All disputes arising out of the contract shall be referred to Arbitration as per the condition stipulated in clause of "Special Condition of Contract".

AS WITNESS the hands of the said parties Signed by the said In the presence of witness NAME

OWNER

OWNER

ADDRESS

Signed by the said In the presence of witness NAME

ADDRESS

10

SPECIAL CONDITIONS

01. **ESTABLISHMENT**:

It is essential condition of this contract that the successful tender shall establish an office in Sangamner & Sangamner Office. for the period of Contract and a duly authorized representative shall always be available in Sangamner Office to deal with all matters concerning this Contract.

02. <u>**TIME LIMIT**</u>

The entire work shall be completed within 30 days form the date commencement which shall be FOUR DAYS from the day of acceptance letter is issued to the contractors or the day on which contractor is instructed to take possession of the site, which ever is later.

03. **TERMS OF PAYMENTS**

The following terms of payments shall apply:

- a) Running Account bills will be paid on item rate basis as certified by our Consultant / Bank engineer and based on bank" security, taking into consideration actual work completed and in progress.
- b) Any work done at factory will not be counted in the running accounts bills until the Material is brought to the site work.

04. **<u>RIGHT TO DISTRIBUTE WORK</u>**

The Bank reserves all rights to divide, distribute the tender items to more than one agency, delete any item or operate items quoted as rate only.

05. **ELECTRICAL SUPPLY**

Bank will provide free water and power required for the works. However the Contractor shall make his own arrangements to draw the power and water from source as decided by the Bank / Consultant.

6. **PROGRAM WORK AND PROGRESS REPORTS** :

The successful contractor will have to submit a detailed bar-chart indicating the schedule of various activities from the date of commencement till completion and get the same approved by Consultant. Contractor shall strictly adhere to the same. This program shall from part of the contract and shall be binding on the contractor. However, the bank reserves the right to alter the program, if necessary, from time to time, no claim whatsoever of any nature by the Contractor on this account shall be entertained by bank. They shall also have to write their requirements about co-ordination from other agencies working at site.

07 OFFICE / STORES ON THE SITE

The contractor shall provide for all necessary storage on the site in a specified area for all materials, which is likely to deteriorate by the action of the sun. Rain or other materials, causes die to exposure, in such a manner that all such materials, Tools, etc., shall be duly protected form damage by weather or any other cause. All such stores shall be cleared away and the ground left in good and proper order on completion of this contract unless otherwise expressly mentioned therein. 08. TESTING OF MATERIALS AND WORKS AND PREPARATION OF SAMPLES The contractor shall, is required by Consultant / Bank, arrange to test materials and / or portion of the work at his own cost in order to prove their soundness and efficiency. If after any such test, the material or portion of work is found, in the opinion of the Consultant and employer to be defective or is found, in the opinion of the Consultant and employer to be defective or unsound, the contractor shall pull down and re-erect the same at his own cost.

Samples of materials and workmanship shall be submitted by the contractor for the Approval of the Consultant / Bank before procurement and execution.

09. <u>NOTICE</u> :

The contractor shall comply with all acts and regulations for the successful completion of the contract works and shall give due notice and pay all fees / taxes etc. as per statutory requirements.

10. MEASUREMENT IS TO BE RECORDED BEFORE WORK IS COVERED <u>UP</u>:

The contractor shall take joint measurements with the Consultant / Bank representative before covering up or otherwise placing beyond the reach of measurement any item of work should the contractor neglect to do so, the same shall be uncovered at contractor's expense or in default thereof on payment or allowance shall be made for such work or the materials with which the same, was executed.

11. **DIMENSIONS**

Figured dimension are to be followed in all large scale details take precedence over small scale drawings. In general the drawings shall indicate the dimensions positions and type of construction, the specification shall indicate the qualities and methods, and the bill of quantities shall Indicate the quantum and rate for each item of work.

Any work indicated in the drawings and not mentioned in the specifications or viceversa shall be furnished as though fully set forth in both. Any ambiguity, conflict of interpretation, errors or inconsistencies discovered in the drawings / documents shall be promptly brought to the provisions giving more rigorous interpretation shall prevail but in the event of disagreement between the contractors and the supervisors, decision of interior designer shall be final incase of any discrepancy, the contractor is to ask for an explanation before proceeding with the work. However specifications will prevail over the drawings.

12. ACTION WHERE THERE IS NO SPECIFICATION :

In case of any class of work over which there is no specification mentioned, the same shall be carried out in accordance with the latest bank of Mharashtra's Standard Specifications subjects to the approval of the Consultant / Bank.

13. CLEARING OF THE SITE OF WORKS :

The contractor shall clear the site of works as per the instruction of the Consultant / Bank. The site of works shall be cleared of all men, materials, shed, etc. belonging to the contractor. The site shall be delivered back to the Bank in a clean and neat condition within a period of one week after the job is completed. In case of failure by

the contractor, the Bank will have the right to get the site cleared at the risk and the cost of contractor.

14. OCCUPATION OF PARTIALLY COMPLETED PORTION BY THE BANK :

The Bank shall be entitle to and will be at liberty to occupy even the partially completed portion of the work by themselves or through their agents and servants if they so desire. Necessary extension of time for completing the work shall have no claim for any compensation whatsoever due to the delay, if any involved in completing the work on account of partial occupation.

15. TYPOGRAPHICAL OR CLERICAL ERRORS :

The Consultant's / Bank clarifications regarding drawing / details or particulars to typographical or clerical errors shall be final and binding on the contractor.

16. INSURANCE :

The contractor shall obtain adequate insurance cover at his own cost for work against any loss or damages as well as workman compensation and third party risk, until the date for virtual completion of the work. The insurance cover shall be in joint names of the owner and the contractor, is to be deposited with the owner within 21 (twenty one) days from the date of issue of work order.

17. PERFORMANCE GUARANTEE FOR ALL BOUGHT OUT ITEMS :

Contractor shall submit written performance guarantee from the manufactures of all bought out items.

18. LANGUAGE OF TENDER :

"English" is the official language of this tender.

19. DOCUMENTS TO BE COMPLEMENTRY :

All sections of contract document and working drawings shall be complementary to each other. In case of ambiguities, discrepancies or contradictions between any two sections. Bank/ Consultants decision shall be final and binding on the contractor for interpretation of same.

20 **<u>CONTRACTOR'S SUPERINTENDENCE</u>** :

The contractor shall appoint a qualified and experienced person to supervise the work at site. The contractor shall obtain the approval from Bank / Consultant about competence of such person.

21 **INSPECTION BY CONTRACTOR** :

The contractor shall inspect all the works and satisfy himself before same is offered for inspection to the Bank / Consultant.

22 **<u>REMOVAL OF DEBRIS</u>**:

Contractor shall arrange to dispose off debris, wood shaving and any other waste product created while carrying out the work, outside Bank's premises. The contractor shall take due care while disposing of such waste materials and ensure that any rules / regulations laid down by Municipal Corporation or any other statutory body are not violated. The contractor shall be responsible and answerable to any complaint arising out of improper disposal of waste material. Quoted rates shall involve the cost of same and no extra payment shall be made towards this account.

23 <u>MOCK UP</u> :

The Contractor shall prepare a mock-up of items, if required, strictly in accordance with the specification, free of cost, for approval of Consultant and bank. The work on these items shall proceed further only after the approval of the mock-up.

- 24. The contractor shall submit original copies of invoices, order forms for any materials purchased for project work, to the bank / Consultant if called for.
- 25. The contractor shall calculate realistic quantities after receipt of drawings and after submitting first interim bill but before submitting, the second interim bill Bank / Consultant.
- 26. The rates quoted by the tenderer in the schedule of quantities will be deemed to be for the finished work and shall include all charges for :
 - a) Labour, maintenance, fixing, arranging, cleaning, making. Good, hauling etc.
 - b) Plant, double, scaffolding, frame work, ladders, ropes, nails, spikes, tools materials, workmen, protection from weather, temporary support, platform, and maintenance of the same. Insurance for labour materials and third party.
 - c) Covering for the walling and other works during inclement weather or strikes or whenever Directed, as necessary.
 - d) All temporary canvas, lights, tarpaulin, barricade, water shoots etc.
 - e) All measures required to be taken for protection of existing works.
 - f) All such temporary weather-proof sheds at such places and in a manner approved by the Consultant for the storage and protection of materials against the effects of sun and rain.
 - g) Testing of materials as per paragraph 8 of "Special Conditions of Contract".
 - h) No tools and plants shall be issued by the Bank under the Contract.

27. **ITEMS ADDITIONAL TO TENDERS** :

- I) The rate of the additional items / non tender items shall be based on the rates quoted by the tenderer for similar items or based on analogues items available in the tender.
- II) Where applicable rates are not directly available, the rates for extra items if any shall be Derived based on the prevalent market cost of labour and material at

site of work including wastage (maximum 5%) plus all types of taxes plus 15% towards contractor's overhead and profit.

28. **ARBITRATION**

All disputes or differences of any kind whatsoever which shall at any time arises between the parties here to touching or concerning the works or the execution or maintenance thereof this contract or the rights touching or concerning the works of the execution of maintenance thereof of this contract or the construction remaining operation of effect there of or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination foreclosure or branch of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final binding) shall after written mentioned be referred for adjudication to a sole arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole arbitrator referred to above, the Employer will send within thirty days of receipt of the notice, to the contractor a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed.

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

If the Employer fails to send to the contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the Employer a panel of three names of persons who shall all be unconnected with either party. The Employer shall no receipt of the names as aforesaid select the persons name and appoint him as the sole Arbitrator. If the Employer fails to select the person and appoint his as the sole Arbitrator. If the Employer fails to select the person and appoint his as the sole Arbitrator within 30 days of receipt of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons form the panel as the sole arbitrator and communications his name to the Employer.

If the Arbitrator so appointed is unable or unwilling to act or resign his appointment or vacates his office due to any reasons whatsoever another sole Arbitrator shall be appointed as aforesaid.

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

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

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

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

The fees, if any of the arbitrators shall, if required to be paid before the award is made and published, be paid half by each of the parties. The cost of the reference and of the award including the fees, if any, f the arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of cost to be paid.

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

Subject to aforesaid the provisions of the Arbitration Act 1992 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the Arbitration proceeding under this clause.

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

General Notes:

- 01. All dimensions are in MKS/Sft system. Unless otherwise stated.
- 02. The quoted rate shall be all inclusive and cover the cost of material including wastage, freight, all types of taxes, duties, royalties, erection, construction, testing of materials, if required samples brought for approval, tools and tackles, plant and equipment's, supervision, overheads, profit and any other expenditure incurred for completion of work as per drawings, specifications and to the full satisfaction of Bank / Consultant.
- 03. The rates quoted shall be valid for working at all heights, depths, and on all floor levels, No extra payment shall be made for scaffolding, staging, ladders etc. for transportation of men and materials at higher or lower levels.
- 04. The item rate specification are indicative. The Contractor will have to carry out the work in accordance with the drawings, technical specifications and / or other conditions laid down in tender document and to the full satisfaction of Bank / Consultant.
- 05. Quantities mentioned against respective items are approximate and can vary to any extent. Payment shall be made on actually executed quantities.
- 06. No claims shall be entertained in case of increase or decrease in quantities Bank / Consultant reserve the right to increase / decrease quantities of any item and also to add / delete any item in totality.
 - a) Bank, Consultant reserve right of Operating any item for any work on any floor.
- 07. The rate for partition, paneling shall include necessary additional frame work supports that may be required to suit site conditions or stability of the item. Decision of Consultant in regards to the need for such additional supports shall be final.
- 08. Rates for partitions, paneling shall include making of necessary cut outs, chasing to be made for conduits, switch boards etc.
- 09. After completion of work, the site shall be handed over clean, after ensuring that all laminates, floors, walls, etc. are spotless clean.
- 10. Rates of all items shall remain constant irrespective of floor level and no extra shall be paid for handling and stacking of materials, removing debris etc. from the site.
- 11. Unless otherwise noted, the method of measurement will be as per I.S. 1200.
- 12. Bank / Consultant reserve the right of operating all 'Quote Rate Only' items.
- 13. Wherever contractor proposes to use 'equivalent' makes (i.e. other than specified) he shall obtain Bank's prior approval. Bank may ask Consultant before giving approval to the same. Any additional cost and time lost due to this will be on Contractor's account an no claims will entertained.'

APPENDIX

01.	Defects Liability Period	12 Months
02.	Period of Final Measurement	45 days
03.	Date of Commencement	3 days after issue of Detailed work award letter
04.	Date of Completion	39Days after the Date of commencement
05.	Liquidated damaged at the rate of	Rs. 0.5% per week or part thereof upto maximum of 5%
06.	Value of works for interim Certificates	50% of the contract amount
07.	Retention Percentage	5% through bill
08.	Total retention money (Security Earnest Money deposit plus Deposit retention money)	4+1% through bill
09.	Period for honoring certificates	Fifteen Days for and running accounts bill One months for final bill

ELECTRICAL WORK TECHNICAL SPECIFICATIONS

F I General :

- 1. The entire installation shall be carried out in accordance with Indian Electriand road code and relevant IS standards up to date. The work shall also comply with all statutory regulations of supply agencies, state inspection authorities and fire regulations.
- 2. Contractor shall be responsible all necessary statutory approvals, clearances, sanctions, drawing approvals and getting actual connections.
- 3. Definition of terms pertaining to all technical requirements as per IEE/ IS shall apply.

4. Contractor shall submit all necessary drawings for scrutiny and approval by Engineer/ Consultant prior to taking up of works. Contractor shall immediately bring out the difficulties faces in execution of works to the notices of Engineer/ Owner/ Consultant.

5. All material, equipment, fittings used in the installation shall be of approved quality confirming of relevant IS specifications.

6. On completion of works contractor shall carry out all necessary tests such as insulation resistance test, continuity of conductors and earth resistance and functional tests along with commissioning checks to the satisfaction of Consultant/ Engineer.

7. Contractor shall furnish necessary test certificates as required by authorities and Consultant. List of IS standards is attached separately.

LIST OF STANDARD

- 01. IS 4648 Code of practice for Electrical layout is Residential Buildings.
- 02. IS 7320 Electrical wiring Installations (System Voltage not exceeding 650 V)
- 03. IS 2274 Electrical wiring Installations (System Voltage not exceeding 650 V)
- 04. IS 3043 Code of practice for ear thing.
- 05. IS 2809 Code of practice for lightening protection.
- 06. IS 1913 General and safety requirements for electrical lighting fixtures.
- 07. IS 5319 Guide for safety procedures and practices for electrical work.
- 08. IS 2268 Electrical call bells and buzzers.
- 09. IS 3412 Electrical water boilers.
- 10. IS 2882 Storage type Automatic water Heaters.
- 11. IS 1646 Protection for Fire safety of building Electrical installation.
- 12. IS 5908 Electrical Installation in Building Method of measurement.
- IS 694 Specification for PVC insulated cables for working Voltages up to and including 1100 V.
- IS 1554 Specification for PVC insulated cables for working Voltages up to and including 1100 V.
- 15. IS 3961 Recommended current ratings for cables PVC insulted and sheathed.
- 16. IS 2147 Degree of protection.
- IS 4237 General requirement for Switchgear and control gear for Voltages not exceeding 1000 VAC and 1200 V.D.C.
- IS 10118 Code of practice for selection, installation and maintenance of swgr and control gear.
- IS 8623 Specification of factory built assemblies of switchgear and control gear for voltages up to and including 1000 V AC & 1200 V AC.
- 20. IS 3106 Code of proactive for selection, installation and maintenance of fuses (Voltages not exceeding 600 Volts.)
- 21. IS 2551 Danger Notice Board.

22. IS	1886	Code of practice	for installation a	nd maintenanc	e of transformers.
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- 23. IS 1160 Distribution Transformers.
- 24. IS 2026 Power Transformers.
- 25. IS 3639 Fittings and Accessories for Transformers.
- 26. IS 6600 Transformer Oil.
- 27. IS 335 Bushing 100 AC.
- 28. IS 3637 Buchholz's Relay.
- 29. IS 7421 Bushing 100 V AC.
- 30. IS 1271 Electrical Insulation for Thermal Rating.

M.V.PANELS AND DISTRIBUTION BOARDS

1. **CONSTRUCTION** :

The panels shall be free standing, floor mounting compartmentalized cubicle type panels with framed structure and bottom channel frame of suitable section. The frame structure shall be rolled/ folded sheet section of 2.0 MM thick sheet. Partitions shall be 1.6 MM thick. The panel shall be dust and vermin proof with neoprene gasketing. Following minimum clearances shall be adhered to while such designs.

A. Between phases	: 35 MM
B. Between Phases & Neutral	: 25 MM
C. Between Phases & Earth	: 25 MM
D. Between Neutral & Earth	: 25 MM

All installation materials used for supports shall be non-hygroscope duly treated to withstand high humidity, tropical conditions and stresses due to temperature variations. The panels shall be so designed to provided sufficient space for cable alleys for incoming cables. Removable gland plates shall be provided. Shrouding with Hylum sheet shall be provided for all compartments and live parts such that no live part is exposed directly on opening any door.

2. CLEANING AND PAINTING:

The fabricated sections shall be thoroughly cleaned by 7 tank process which include alkaline degreezing, cold water rinsing, acid pickling, water rinsing, phosphating and pacivation. Panels shall then be painted with 2 coats of corrosion resistant primer and oven dried under controlled conditions.

Then 2 coats of stoving enamel paint of approve shades shall be given.

3. BUSBARS :

The bus bar unless otherwise specified shall be of high conductivity aluminum alloy of grade E9 per IS 5082. The bus bar shall be provided with suitable SMC bus bar support suitable for withstanding fault level up to 50 KA. The bus bar shall also withstand above fault level without permanent deterioration. The connections shall be securely done with adequate size of plated hardware plate and spring washer sets. The inter connections shall be made with solid bus bars as far as possible. Bus bars shall be provided with colour coded PVC sleeves.

4. SWITCHGEAR :

The switchgear used in panels shall be pertaining to relevant IS standards and shall be from the approval list. The terminals shall be suitable for accepting bus bars and cables of relevant sizes suiting the switchgear rating. The metal parts other then live contacts shall be treated against corrosion. All switches shall be with door interlocked provision.

5. MEASURING INSTRUMENTS AND INSTRUMENT TRANSFORMER :

Direct reading instruments shall be in confirmation with IS 1248 and of accuracy class 1.0. All meters shall be flushed mounting type with minimum 96 X 96 MM size and in dust proof enclosures. The meters shall have white dials with black scales. All meters shall have sealing arrangement and zero adjustment secure from outside.

Voltmeters and ammeters shall be moving iron type with suitable selector switches and protective fuses for potential circuits.

The current transformers shall be single pole wire wound resin cast accuracy class 1.0 for metering and 5p for protection. Separate CT's shall be provided for metering and protection. The polarities shall be prominently marked CT circuits shall be wired with 2.5 Sqm. multistrand copper wires. CT's shall not be kept open and terminal-shorting arrangement shall be provided.

6. INDICATION AND CONTROL :

The control switches shall be rotary type with suitable isolation transformer provided for control supply. Control supply bus shall be provided wherever necessary. Indicating lamps shall be translucent lamp covers and with arrangement to replace bulbs from front. Push buttons shall be momentary contact. Type with suitable color cod and shall be fitted with integral marker plate.

The control wiring shall be with 1.5 Sqm. multistrand 1100 V gr copper wire except CT Circuit, which shall be with 2.5 Sqm. wires. Identification ferules and color coding shall be used for all wire control fuses shall be provided wherever required. The control wires shall be bunched and traced properly and shall not be left hanging.

7. **DISTRIBUTION BOARDS** :

The distribution boards shall generally be as per panel specification above. All DB's shall be MCB type suitable for concealed/ surface installation. DB's shall be factory made vertical type with hinged secured front covers, knob protection cover, top and bottom knock outs, earthing studs circuit marking provisions.

The DB shall be completed pre wired with necessary bus bars interconnecting terminals, neutral bus.

The MCB's shall confirm to IS 8828 and shall have 9 KA breaking capaand ASHOKA MARG .

8. INSPECTION AND TESTING :

Inspection and testing for all panels as per IS Standard shall be offered to consultant/ owner's

representatives.

CABLES AND CABLE LAYING

A) H. T. CABLES:

i)

vii)

i)

ii)

iii)

iv)

The H.T. cables shall be XLPE insulated of appropriate voltage class sheathed, armored multistand aluminum conductor manufactured in accordance with S 7098 part IS II

- ii) The cables shall be supplies with non-returnable wooden drums in appropriate lengths and shall be free from twists and surface damages.
- iii) The ends of the cables shall be properly sealed and secured so as to avoid water seapage during transit and storage.
- iv) The cables shall be laid at a depth of 1000 MM minimum and shall have 75 MM sand cushion brick box and top RCC protective tile marked "H.T. cables" of size 600 X 225 MM.
- v) Cables shall be laid with the help of jacks and rollers to avoid dragging and twisting. Sufficient loops shall be provided attends and in center.
- vi) Cables shall be supported with protective pipes and clamps on vertical runs and shall be laid through appropriate pipes for road and gutter crossings.
 - Heat shrinkable/ push on jointing kits of reputed makes shall be used for indoor/ outdoor end terminations. Heat shrinkable boots shall be provided for bushing connections.

B) L. T. CABLES. :

All power and distribution cables shall be 1100 V grade, PVC insulated and sheathed armored, multistrand aluminum conductor cables unless otherwise specified.

All control cables shall be 1100 V grade PVC insulated and sheathed armored – multistrand copper conductor cables unless otherwise stated.

The cables shall confirm to IS 1554-1976 with up to date amendments. Type test certificates of the cables from manufactures for the particular drams shall be provided.

LAYING :

The cables shall be thoroughly inspected for transit damage and irregularity in sheath etc.

- Sufficient manpower with necessary equipment like jacks, rollers shall be provided for unwinding and laying the cables and dragging and twisting shall be avoided. Proper unwinding methods shall be used to avoid twists.
- Cables shall be laid at a depth of at least 750 MM foreground level with 50 MM sand bedding, brick box with cushion for protection. Bending radius provision of atleast 8 D shall be kept while laying. The trenches shall be filled and reinstated layer by layer leaving crown on top.
- H.T. & L.T. cables shall be laid in same trence. When more than one cable are laid in same trench a gap of atleast 150 mm shall be kept between the cables.

Cables laid on walls, trenches shall be supported at every 600 MM for vertical run and every 450 MM for horizontal run. Suitable clamps shall be provided for fixing and support. Vertical runs near ground level shall be protected by GI Pipes of suitable size up to atleast 1200 MM.

JOINTING:

Jointing or end termination of cables shall be done by skilled person only. Straight through joints shall be

avoided as far as possible. The length of the cables are approximate and actual site measurements shall be

taken by contractor prior to cutting any cable. Heavy duty compression type brass shall be used for

outdoor connections. Crimping type lugs with suitable brass hardware shall be provided for connections.

TESTING:

Cables shall be meggered as soon as they are brought to site. Insulation resistance shall also be tested.

i) ii) After cutting.

After laying and preparing the joint. Following test shall be taken after completing the installation

- a) Cable continuity.
- b) Earth continuity.
- c) Insulation resistance.

 $1000 \ \mathrm{V}$ megger shall be used for testing 3-phase 415-volt system.

a) <u>POINT WIRING</u>

1. CONDUITS : ACCESSORIES AND JOINTS :

All conduits shall be HG MS conduits 165 WG up to 25 MM dia and 145 WG above size. All conduit

accessories shall be screwed type and conduits shall be joined by means of threaded coupling only.

Checknuts shall be provided at all joints for tightening and sealing. Ends of conduits shall be coated with

plastic adhesive.

All conduits and accessories shall be painted with 2 coats of Red Oxide before installation and accessible parts of conducting after installation shall be painted with enamel paint to match the wall paint. Capaand ASHOKA MARG of conduits is separately given. In case of rigid PVC conduits, the conduits shall be made using special adhesives used for pressure pipe joints.

2. SURFACE CONDUITING :

The surface conduits shall be fixed with help of 20 SWG saddles on spacers at every 600 MM for vertical

run and every 450 MM for horizontal run. The runs shall be straight with suitable sleeves for structural

member crossing at the time of costing.

In case of false ceiling the conduits shall run on walls/ trusses above false ceiling level as far as possible. The connections between such runs and fixtures shall be made with flexible conduits.

3. CONCEALED CONDUITING :

the concealed conduit work shall be carried out along with construction of walls prior to plaster. The work covers chasing walls if necessary fixing the conduits, boxes, accessories, redoing the damaged surface. The conduits shall be laid such that they are little below the brick level to avoid cracks. Elbow shall not be used and bends shall be avoided as far as possible using offsets. Pull boxed shall be provided at suitable locations. Deep junction boxes only shall be used in slabs.

The pull and junction boxes shall not be clustered at one place and shall be so arranged that they should not be easily seen from heavy movement areas. All cases shall be taken to secure joints and boxes in place. All vertical runs shall be sealed at top.

4. SWITCH BOARDS :

The switchboards unless specified in item shall be MS fabricated from 16 SWG sheet steel with all sides

except top. Top plate fixing arrangement shall be provided at all corners with tapped holes. At least 1 No.

earth stud shall be provided. Switchboard shall be atleast 60 MM. Deep. Switch board shall be painted

with 2 coats of Red Oxide primer from inside and outside. In case of surface mounted boards 2 coats of enamel paint of suitable shed shall be given to accessible sides.

The switch plate shall be 2 MM thick while phenol bonded sheet unless specified and shall be fixed with crom plated screws with cap washers.

5. SWITCH & SOCKETS

All 5/15 a switches shall be piano type 240 V grade of approved color and of same shed throughout. 5A Sockets shall be 3 pin and 15 SMP sockets shall be 5 pin (Universal). All switches shall be provided one phase wires only. For power points more than 10 AMP capaand ASHOKA MARG 30 AMP flush type DP switches shall be provided.

6. WIRES AND WIRING INSTALLATION:

All wiring shall be carried out with PVC insulated, 1100 V grade multisrand copper conductor wires of specifies sizes.

The conduits shall be ventilated and drained before drawing the wires.

He circuit wires shall be laid in looped formation with suitable termination arrangement in junction boxes. T joints shall be used. No joints shall be allowed in drawn lengths. Crimping type lugs shall be used for switch interconnections. Color codes shall be followed :

Separate earth wire of same class and suitable size shall be drawn along with other wires. Mains and sub mains shall be drawn in separate conduit of adequate capacities with separate earth wires. All circuit wires shall be meggered for continuity and insulation resistance.

7. WIRING CLASSIFICAITON

i)	Lighting Sub Mains	: 2*2.5 + 1*1.5 Sqm. wires.
ii)	Light/ Fan/ 5A/ Ex Fan Pts.	: 2*1.5 + 1*1.5 Sqm. wires.
	Call Bell	
iii)	15 A Point	: 2*2.5 + 1*1.5 Sqm. wires.
iv)	As above but looped	: 2*4.0 + 1*2.5 Sqm. up to 1 st point.
		2*2.5 + 1*1.5 Sqm. for Looped point.
v)	1 Tone window A/A & 20A	: 2*4.0 + 1*2.5 Sqm wires.
	Power Point.	
vi)	Window A/C 1.5 Tone : 2*6.0	+ 1 *2.5 Sqm. wires.

8. CONDUIT CAPACITIES :

Geyser & 30 AMP Pts.

WIRE SIZE		1.5		2.5		4.0		6.0		10.0
CONSUIT SIZ	ĽΕ									
19/20 MM		4		3						
25 MM	5		4		3		2			
32 MM	8		6		4		4		3	
40 MM	12		8		6		5		4	

9. MOUNTING HIGHTS (ABOVE FFL) :

- i) Light Points on Walls : 2250 MM.
- ii) Switch boards DB's : 1200 MM
- iii) Socket outlets : 1200 MM/ 300 MM

iv) Telephone Sockets	: 130 MM
v) Geyser outlets	: 1500 MM.
vi) Exhaust Fan outlet	: Switch at 1200 MM Socket near Ex. Fan.
vii) A/C Point	: Bellow window sill / Near A/C Equipment.

APPROVED LIST OF MATERIAL

R M U / OSF : ANDRW YULE / ME 1.

2.	Lightening Arrestors	: ELPRO.
3.	XLPC Cable joints	: M-Seal / Xicon/ Rechem.
4.	ACBs	: L&T / C&S/ Siemens.
5.	Fuse switch & switch fuse	: L&T /C&S /Siemens.
6.	Change over switches	:ELCON/ Haveles.
7.	Contractors	: Siemens / L&T/ Telemeq/ABB.
8.	Meters	: Rishabh (L&T) / AE.
9.	CTS	: AE/ Kappa/UE.
10.	KWH Meters	: OEC / Jaipur/ Gyro.
11.	Tracector Meters	: SIMCO/ L&G.
12.	Indicating Lamps	: L&T/ Vaishno/ Teknik.
13.	Rush Buttons	: L&T/ Vaishno/ Teknik.
14.	Relays (Protections)	: EE/Telemechanique (Micro Processes based)
15.	MCCB	: L&T.
16.	MCB	: MDS/ S&S/Indo. Kopp.
17.	RCCB	: Datar/ MDS/ EE.
18.	MCBDB	: MDS/ Indo Kopp.
19.	Cables	: Finolex/ Polycab/
20.	Glands	: Dowels/ EMI.
21.	Telephone Rag Blocks	: ITI.
22.	Telephone Sockets.	: CPL/ Anchor.
23.	Telephone Cables	: Finolex/ Delton.
24.	PVC Conduits	: Precision/ Circle Arc/ Asian.
25.	Casing Capping	: Modi / Precision.
26.	Wires.	: Finoles/ Sundeep/ Deccan/ Vinay.
27.	Switch sockets.	: CLIPSAL
28.	Ceiling Rose, Holders	: Vinay/ CPL.

29.	Lighting Fixtures	: Philips/ Wipro.
30.	Ceiling fans	: Crompton/ Orient.
31.	Dimers/ Electronic Regulator	: Crompton.
32.	Exhaust Fans	: GEC/Crompton.
33.	Capacitors	: Prabhodhan/ SUbhodhan/ Malde.
34.	Industrial Socket	: Crompton/ BCH.
35.	APFCR	: Syntron/ Ridrashakti.

SAFETY CODE

1.	The first aid appliance adquate supply of sterilized dressings and cotton wool shall be maintained	
	in a readily accessible place.	
2.	An injured person shall be taken to public hospital without loss of time, in case where the injury	
	necessitates hospitalization.	
3.	Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be	
	done from ground.	
4.	No portable single ladder shall be over 8 meter in length. The width between the side rails shall	
	not be less than 30 cm (clear) and distance between two adjacent range shall not be more than 30 cm.	
	When the ladder is used on an extra mazdoor shall be engaged for holding the ladder.	
5.	Every opening in the floor of the building as in a working platform be provided with suitable	
	means to prevent fall of persons or materials be providing suitable fencing or railing where minimum	
	height shall be one meter.	
6.	No floor, roof or other part of structure shall be overloaded with debris or materials as to render	
	it unsafe.	
7.	Paint :	
No paints containing lead or lead products shall be used in the form of paste or ready-made paint.		
i)	Suitable facemask should be supplied for use by the workers when the paint is	
	applied in the form of spray or surface having lead paint rubber and scraped.	
8.	Overall shall be supplied by the contractor to the painters and adequate facilities shall be	
	provided to enable the working painters to wash during the period of cessation of work.	
9.	Hoisting machines and tackle used in works, including their attachments, anchorage and supports	
	shall be in perfect condition.	
10.	The ropes used in hoisting or lowering materials or as a suspension shall be of durable and	
	adequate strength and free from defects.	

ANNEXURE 1

1. THESE ARE GUIDELINE , STANDARD SPECIFICATION AND STANDARD DESIGN PATTERN AS PER NORMS DECIDED BY BANK OF MAHARASHTRA.

2. THIS WILL BE SUPERCIATE ON ALL SPECIFICATIONS MENTIONED IN TENDER (IF IT IS VARRING)