



**THE NEW INDIA ASSURANCE COMPANY LIMITED**

**KOLKATA REGIONAL OFFICE**

**4 MANGOE LANE, KOLKATA-700001**

E-TENDER DOCUMENT  
&  
SCHEDULE OF QUANTITIES  
FOR  
INTERNAL REFURBISHMENT WORK  
*(FURNISHING, ELECTRICAL & AC WORKS)*  
AT  
*EZRA STREET BUSINESS OFFICE*

**I N D E X**

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**E-Tender Notice Reference No. 02 / Est & Estb /KRO/2023-24**

Tender Title: “ **INTERNAL REFURBISHMENT WORK AT EZRA STREET DIVISIONAL OFFICE, AT 14/1B, Ezra Street, Kol - 1 , WB**”

Tender publishing date	10/10/2023 at 01.00 p.m
Last Date of Bid submission	31/10/2023 at 03.00 p.m
Tender Fees(Non- Refundable)	Rs. 500 /- (plus 18% GST) (Rs five hundred only plus 18% GST)
EMD(Refundable)	Rs. 31,000/- ( Rs. Thirty One Thousand) <i>The e-Bid submitted without EMD in the prescribed formats or valid NSIC/MSME certificate of exemption for the tendered items will not be accepted</i>
Address for communication and submission of EMD and Tender fee s.	Regional Manager, Estate & Establishment Department, The New India Assurance Co. Ltd, Kolkata Regional Office, 4, Mangoe lane, Kolkata - 700001
Contact Details	Telephone: 9830382193 e-Procurement portal: <a href="https://www.tenderwizard.com/NIAEPROC">https://www.tenderwizard.com/NIAEPROC</a> or <a href="http://www.newindia.co.in">www.newindia.co.in</a>
Architect	<b>SUDIP SUR &amp; ASSOCIATES</b> Contact no. 8910 513 714, 98300 17895

**SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING**

1. Tender document with detailed terms and conditions is available on our Website [www.newindia.co.in](http://www.newindia.co.in). Interested parties may download the same and participate in the tender as per the instructions given therein, on or before the due date of the tender. The tender shall have to be submitted online through the e-Procurement system on <https://www.tenderwizard.com/NIAEPROC>.
2. As a pre-requisite for participation in the tender, vendors are required to obtain a valid Digital Certificate of Class IIB (with both signing and encryption component) and above as per Indian IT Act from the licensed Certifying Authorities (For ex. N-codes, Sift, E-mudra etc.) operating under the Root Certifying Authority of India (RCIA), Controller of Certifying Authorities (CCA). The cost of obtaining the digital certificate shall be borne by the vendor. In case any vendor so desires, he may contact our e-Procurement service provider **M/s. Antares Systems Ltd** Mumbai for obtaining the Digital Signature Certificate.
3. Corrigendum / amendment, if any, shall be notified on the site <https://www.tenderwizard.com/NIAEPROC>. In case any corrigendum / amendment is issued after the submission of the bid, then such vendors, who have submitted their bids, shall be intimated about the corrigendum/amendment by a system-generated email (In case of open tender corrigendum / amendment will be on the public dash board and no mail will be fired for the vendor who has not participated by that time). It shall be assumed that the information contained therein has been taken into account by the vendor. They have the choice of making changes in their bid before the due date and time.
4. Vendors are required to complete the entire process online on or before the due date of closing of the tender.
5. The Commercial/Price bid of only those vendors shall be opened whose Technical bid is found to be acceptable to us. The schedule for opening the price bid shall be advised separately.
6. Directions for submitting online offers, electronically, against e-Procurement tenders directly through internet:
  - i. Vendors are advised to log on to the website (<https://www.tenderwizard.com/NIAEPROC>) and arrange to register themselves at the earliest.
  - ii. The system time (IST) that will be displayed on e-Procurement web page shall be the time considered for determining the expiry of due date and time of the tender and no other time shall be taken into cognizance.
  - iii. Vendors are advised in their own interest to ensure that their bids are submitted in e-Procurement system well before the closing date and time of bid. If the vendor intends to change/revise the bid already entered, he may do so any number of times till the due date and time of submission deadline. However, no bid can be modified after the deadline for submission of bids.
  - iv. Once the entire process of submission of online bid is complete, the vendors are required to go to option own bid view through dashboard and take the print of the envelope receipt as a proof of submitted bid.
  - v. Bids / Offers shall not be permitted in e-Procurement system after the due date / time of tender. Hence, no bid can be submitted after the due date and time of submission has elapsed.

- vi. No manual bids / offers along with electronic bids / offers shall be permitted.
7. Once the Commercial/Price bids are opened, vendors can see the rates quoted by all the participating bidders by logging on to the portal under their user ID and password and clicking on other bid view.
8. No responsibility will be taken by and/or the e-Procurement service provider for any delay due to connectivity and availability of website. They shall not have any liability to vendors for any interruption or delay in access to the site irrespective of the cause. It is advisable that vendors who are not well conversant with e-tendering procedures, start filling up the tenders much before the due date /time so that there is sufficient time available with him/her to acquaint with all the steps and seek help if they so require. Even for those who are conversant with this type of e-tendering, it is suggested to complete all the activities ahead of time. It should be noted that the individual bid becomes viewable only after the opening of the bid on/after the due date and time. Please be reassured that your bid will be viewable only to you and nobody else till the due date/ time of the tender opening. The non-availability of viewing before due date and time is true for e-tendering service provider as well as New India Assurance officials.
9. New India Assurance and/or the e-Procurement service provider shall not be responsible for any direct or indirect loss or damages and or consequential damages, arising out of the bidding process including but not limited to systems problems, inability to use the system, loss of electronic information etc.
10. Bidder should arrange for the Tender Cost/EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date and time of the tender.
11. The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.
12. The details of the Tender Cost/ Earnest Money Deposit(EMD) document submitted physically to the Department before due date of submission of tender and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected. Ensure that the copies of Tender Cost/EMD are submitted under their respective heads only.
13. The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
14. Bidder should take into account all the corrigenda published before submitting the bids online.
15. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected
16. Please note that if rates are not filled in BOQ, then system will show it as zero. If bidder fails to quote any rates in the BOQ, then their bid will be considered 'incomplete bid' and their bid will be rejected. Only complete bids will be considered for further evaluation.
17. Tender cost/EMD exemption will be as per government rules applicable to MSME. Please submit relevant certificates in respective heads along with hard copies of the documents in the department for pre-verification.

18. Only bids submitted through online mode will be considered for evaluation.
19. If the amount quoted by the L1 bidder is less than 25% of the estimated cost, she/he shall submit a bank guarantee of amount equal to the difference in the amount quoted and total estimated cost. In case of freak rates for particular items, the L1 bidder shall submit a bank guarantee equal to the difference between the amount quoted and the estimated rate of particular items.
20. In case of any clarification pertaining to e-Procurement process, the vendor may contact the following agencies /personnel:

Sl.No.	Particulars	Company Name	Contact Details
1	FOR e-Tendering Support	Antares Systems Ltd	sushant.sp@etenderwizard.com Contact No: 9923972175; 9731468511
2	For Tender related Queries	The New India Assurance Co. Ltd	9830382193

## INSTRUCTION FOR FILLING IN TENDER

**SECTION – I**  
**THE TENDER OFFER:**

The tender documents will be available on official web-site of NIA [www.newindia.co.in](http://www.newindia.co.in) well as our E-Tender portal [https:// www.tenderwizard.com/NIAEPROC](https://www.tenderwizard.com/NIAEPROC)

**The bidder has to use the E-Tender portal only** for participating in the tender (Refer **SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING**).

Downloading of tender document from E-Tender portal is mandatory for tender participation. The online bids under two envelopes/cover systems comprising of (1) The Technical Bid and (2) Commercial Bid should be submitted online on E-Tender portal on or before 31/10/2023 before 3.00 PM. The commercial Bill should be quoted **excluding GST & other Taxes (if any) which shall be payable by NIA as actual.** The various documents to be submitted Online and Offline along with the Technical and the Commercial Bid are motioned in the Section II and annexure-1 of this documents.

No Offline documents shall be accepted except of tender cost and EMD.

At any time prior to the last date of receipt of bids, the Company may, for any reason, weather at its own initiative or in response to clarifications requested by the prospective bidders, modify the tender documents by clarifications.

The clarifications, if any, issued by the Company at any time before the due date of submission of the bid will become part of the tender document and would be notified on both the websites.

No bid will be accepted after the due date &time.

The details of the Tender Cost/ Earnest Money Deposit(EMD) document submitted physically to the Department before due date of submission of tender and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected. Ensure that the copies of Tender Cost/EMD are submitted under their respective heads only

**EARNEST MONEY DEPOSIT (E. M. D.):**

The intending bidders should submit Demand draft of an amount of **Rs. 31,000/- (Rupees Thirty One thousand only)** towards EMD drawn in favour of “**The New India Assurance Company Limited**” payable at **Kolkata**.

The EMD will not carry any interest.

**SECTION – II**

### **PART A-TECHNICAL BID (ONLINE)**

The technical bid, apart from the online template filling up, should contain the scanned copies of following documents. The documents shall be arranged in the same orders as mentioned in online bidding format.

**Demand Draft** for Tender Document Fees worth **Rs. 500/- plus 18% GST (Rupees five hundred only plus 18% GST)** towards Tender Fee drawn in favour of “**The New India Assurance Co., Ltd.**” payable at Kolkata.

**Demand Draft for EMD** amount of **Rs. 31,000/- (Rupees Thirty One thousand only)** drawn in favour of “**The New India Assurance Co., Ltd.**” payable at Kolkata.

Technical Bid as per **Annexure-1** and supporting documents.

### **PART A-TECHNICAL BID (OFF LINE)**

The following documents :

Original DD towards tender document Fees

Original DD towards EMD amount

are required to be submitted offline in physical / hard copies to **Regional Manager**, Estate & Establishment Department, The New India Assurance Co. Ltd, Kolkata Regional Office, 4, Mangoe Lane, Kolkata – 700001 by on or before 31/10/2023 before 03.00 PM in one sealed envelope super scribed as **Offline Document Submission for “INTERNAL REFURBISHMENT WORK AT EZRA STREET DIVISIONAL OFFICE, AT 14/1B, Ezra Street. Kolkata – 700 001”- for The New India Assurance Co. Ltd.**, failing which the bidder liable to be rejected and their tender may not be opened.

The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during submission time. Other wise the submitted bid will not be acceptable.

### **PART B - COMMERCIAL BID (ON LINE ONLY)**

Commercial Bid as per **Annexure-4**

**Note: No offline documents are required to be submitted for commercial bid.**

## SECTION – III

### GENERAL TERMS & CONDITIONS

#### **1. PROCEDURE FOR PROCESSING THE TENDER DOCUMENTS:**

- 1.1 The Committee constituted by the Company will open the “Technical Bid” electronically and off-line documents cover physically. In case, offline documents sealed cover does not contain Demand Draft towards Earnest Money Deposit and Tender documents fees, the bid offer may be rejected.
- 1.2 The Commercial Bids of Technically qualified bidders will be opened by the Committee electronically in the presence of the bidders who wish to be present for opening; L1 will be identified on the Total Price of the Commercial Bid & Summary.
- 1.3 Any Commercial Bid incomplete in any respect will be disqualified.
- 1.4 This procedure is subject to changes, if any, and the procedure adopted by the Company for opening the tender shall be final and binding on all the parties.

#### **2. Location:**

- 2.1 Address of the Premises: “**INTERNAL REFURBISHMENT WORK AT EZRA STREET DIVISIONAL OFFICE, AT 14/1B, Ezra Street. Kolkata – 700 001**” Tenderers must get acquainted with the proposed work and study drawings, designs, specifications, conditions of contract and other conditions carefully before tendering. The Tenderer shall seek clarifications on any item, if required, prior to submitting his tender. No request of any change in rates or conditions for want of information on any particular point shall be entertained after receipt of the tenders.
- 2.2 The Tenderer is advised to inspect the site to ascertain the nature of site, access thereto, location, facilities for procurement of materials, labour rates and execution of the work. The Tenderer shall be deemed to have full knowledge of the site and drawings whether or not he actually inspects them.

#### **1.0 AGREEMENT:**

The successful bidder shall have to enter into a detailed Agreement. A Performa/Draft Agreement as mentioned in **Annexure-3**. However, the Company reserves the right to alter/vary/amend/modify all or any of the terms set out in the said Performa/Draft Agreement. **Commercial Bid)**

**Encl:**

**Annexure-1(Technical Bid)**

**Annexure-2 - (Security Deposit-Bank Guarantee Proforma)**

**Annexure-3-( Agreement Draft)**

**Annexure-4- (Commercial Bid)**



## **GENERAL CONDITIONS**

Contractor will not disclose details of the work to any person or persons except those engaged in its performance, and only to the extent required for the particular portion.

Contractor will not give any item concerning details of the work to the press or a news disseminating agency without prior written approval from NIA / Architect contractor shall not take any pictures / photographs on site without written approval of NIA /Architect.

### **A. DEFINITIONS:**

1. The "CONTRACT" means the documents forming the tender and acceptance thereof any the formal agreement executed between NIA and the Contractor together with the documents referred to therein including these conditions, the specifications bills of quantities, designs, drawings and instructions issued from time to time by NIA or any person authorized by the competent Authority, and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.
2. In the contract the following expressions shall unless the context otherwise required, have the meanings hereby respectively assigned to them.
3. The expressions "Works" or "Work" shall unless there be something either in the subject or context repugnant to such construction, be constructed and taken to mean the works by or by virtue of the contract contracted to the executed whether temporary or permanent and whether original, altered, substituted or additional.
4. The "Contractor" shall mean the individual or firm or company whether incorporated or not undertaking the works and shall include the legal personal representative of such individual or the persons composing such firms or company and the permitted assigns of such individual or firm or firms or company.
5. The "Contract Sum" shall mean in case of item rate contracts, the cost of the works arrived at after extension of the quantities shown in the schedule of quantities by the items rates quoted by the Contractor / Tenderer for the various items.
6. A "Day" shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
7. "Expected risks" are risks due to riots (otherwise than among Contractor's labours / employees) and civil commotions (in so far as both these are uninsurable), wars (whether declared or not), invasions, act of foreign enemies, Hostilities, Civil war, rebellion, insurrection military or usurped power, any act of Governments, damage from aircraft, acts of God such as earthquake, lighting and unprecedented floods, and other causes over which the contractor has no control and accepted as such by NIA of the part of works in respect of which a certificate of completions has been issued.
8. "Market-Rate" shall be the rate as decided by Architects on the basis of the cost of materials and labour at site when the work is to be executed plus the

percentage mentioned in **Schedule `F`** to cover all overheads and profits. This is applicable to Extra items.

9. "Schedule" referred to in these conditions shall mean the relevant schedule (s) annexed to the Tender documents / papers issued by NIA of the standard schedule of rates prescribed by NIA and the amendments thereto issued from time to time.
10. "Project Architect" shall mean SUDIP SUR & ASSOCIATES  
(Address of the Architect :- 14/2, Kali Kumar Mukherjee Lane. Sibpur. Howrah – 711 102)and will include duly authorised representative or any other person empowered by them in this behalf to discharge all or any of their functions.
11. Architect shall mean qualified Engineer or nominated official (Authorised official) duly appointed by NIA / Architect who will act on their behalf.
12. The competent authority shall mean The **Regional Manager**, Estate Department, The New India Assurance Co. Ltd., Kolkata Regional Office and will include duly authorised representative / officials or any other person empowered by NIA / Architect in this behalf to discharge all or any of their functions.
13. Where the context so requires words imparting the singular only include the plural and vice-versa.
14. Headings and marginal notes to these conditions shall not be deemed to form part thereof or be taken into consideration in the interpretations or constructions thereof of the Contract.
15. **Foreclosure of Contract** in full or in part due to Abandonment or Reduction in scope of work:

If at any time after acceptance of the Tender NIA shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Architect / NIA (Authorized official) shall give notice in writing to the effect to the contractor and the contractor shall have no claim to any payment of compensations or other issues whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

## **B. TERMINATIONS OF CONTRACT FOR DEATH:**

1. If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partner dies then unless the Competent Authority is satisfied that the legal representative of the individual contractor or of the proprietor of the concern and in the case of partnership, the running partners are capable of carrying out and completing the contract the Competent Authority shall be entitled to cancel the contract / terminate the contract as to liable for payment of any compensations to the estate of the deceased Contractor and / or to the surviving partners of the Contractor's firm on account of the cancellations of the contract. The decision of the competent Authority that the legal representatives of the deceased Contractor or the surviving partner of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of

such cancellation NIA shall not hold the estate of the deceased Contractor and / or the surviving partners of the Contractor's firm liable in damages for not completing the contract.

### **C. CANCELLATIONS OF CONTRACT IN FULL OR PART:**

If the Contractor

- 1) At any time makes default in proceeding with the work with due diligence and continues to do so after a notice in writing within 7 days from the NIA/Architect/Authorized Official.
- 2) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is to given to him in that behalf by the NIA / Architect / Authorized official.
- 3) Fails to complete the works or items of works within individuals / particular date of completion on or before the date (s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the NIA/Architect.
- 4) Shall offer or give or agree to give to any person in NIA service or to any other person on his behalf any gift or considerations of any kind as an inducement or reward for doing or for bearing to do or for having done or fore borne to do any act in relations to obtaining or execution of this or any other contract for NIA.
- 5) Shall obtain a contract with NIA as a result of running tendering or other non bonafide methods of competitive tendering or.
- 6) Shall obtain / enter into a contract with NIA in connection with which commission has been paid or agreed to be paid by him or to his knowledge unless the particulars of any such commission and the terms of payments thereof have previously been disclosed in writing to the competent Authority / NIA. Being an individual or if a firm any partner thereof shall at any time being adjudged insolvent or have a receiving order or order for administration of liquidations or composition (other than a voluntary liquidations for the purpose of amalgamation or construction) under an insolvent act for the time being in force or make any conveyance in assignment of his effective or composition or arrangement for the benefit of his creditors or purpose so to, or if any applications be made under any Insolvency Act for the time being in force for the sequestration's of his estate or if a trust deed be executed by him for the benefit of his creditor or.
- 7) Being a company shall pass a resolution or the court shall make an order for the liquidation of its affairs or a receiver or manager on behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the court or debenture holders to appoint a receiver or manager .
- 8) Shall suffer an execution being levied on his goods and allows it to be continued for a period of 35 days or.
- 9) Assigns, transfer, sublets (engagement of labours on a piece work basis or of labour  
With materials not to be incorporated in the work shall not be deemed to be subletting) or attempts to assign transfer or subject the entire works or any portion of the work without prior approval of the competent Authority. The competent Authority may without prejudice to any other right to remedy which shall have oc curred or shall occur thereafter to the NIA by written notice cancel the contract as a whole or only such items of work in default from the contract.
- 10) NIA shall on such cancellation have power to:
  - i. Take possession of the site and any materials, constructional plant / building etc., implements, stores etc

- ii. Carry out the incomplete work by any means at the risk and cost of the contractor.
- 11) On cancellation of the contract in full or in part the site / authorized official shall determine what amount if any, is recoverable from the contractor for completion of the works or part of the works or in case of the works or part of the works is not to be completed the loss or damage suffered by NIA In determining the amount credit shall be given to the contractor for the value of contractor's materials taken over and incorporated in the work and use of tackle and machinery belonging to contractor.
- 12) Any excess expenditure incurred or to be incurred by NIA in completing the works or part of the works or the excess loss or damages suffered or may be suffered by NIA as aforesaid after allowing such credit shall be recovered from any money are nor sufficient the contractor shall be called in writing to pay the same within 30 days. If the contractor shall fail to pay the required sum within the aforesaid period of 30 days the NIA / Architect / authorized official shall have the right to sell any or all of the Contractor's unused materials, construction plant, implements, temporary buildings etc., and apply the proceeds of the sale thereof towards the satisfaction of any sums due from the Contractor under the contract and if thereafter there by any balance outstanding from the Contractor it shall be recovered in accordance with the provisions of the contract.
- 13) Any sums in excess of the amounts due to the NIA and unsold materials, construction plant etc., shall be returned to the contractor, provided always that if the cost or anticipated cost of completion by NIA of the work or part of the work is less than the amount which the contractor would have been paid and the completed the works or part of the works such benefit shall not accrue to the Contractor.

#### **D. TENDERS, RATES ETC.**

1. The work to be carried out under the contract shall except as otherwise provided in these conditions include all labour, materials, tools, plants, equipment's and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the schedule of quantities shall unless otherwise stated be held to included waste on materials, carriage and cartage, carrying in, return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles.
2. The attached bill of quantities is our best estimate of the job.
3. All the quantities therein are approximate, payments will be made on the actual measurements / certified by the Architect / NIA authorised official & project Architect.
4. NIA will have the right to omit, alter, add or cancel any of the items of work shown in the schedule without assigning any reason whatsoever and no claim for compensation will be entertained for the same, NIA is further at liberty to carry out any items of work departmentally or through any other contractor and no compensation will be paid to the main contractor on that account.
5. Work contained in the Schedule of Quantities comprises the erection of a reinforced concrete structure, with masonry walls, windows / doors, plastering / filling etc. water tanks, plumbing / sanitary work, interior works, electrical work and exterior work within the premises such as roads, paving etc.
6. Before submitting the Tender, the contractor shall visit and examine the site situated at **“INTERNAL REFURBISHMENT WORK AT EZRA STREET DIVISIONAL OFFICE, AT 14/1B, Ezra Street. Kolkata – 700 001** “and satisfy himself as to the nature

of the existing roads or other means of communications, the character of the soil and of the excavations, the correct dimensions of the work facilities for procuring various construction and other materials and shall obtain generally his own information on all matters and conditions affecting the execution of the works. No extra charge made in consequence of any misunderstanding or incorrect information on any of these points or on the grounds of insufficient description will be allowed. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of quantities which rates and prices shall except as otherwise provided cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.

7. It must be clearly understood that the whole of the conditions and specifications are intended to be strictly enforced and that no extra work will be allowed unless they are clearly outside the spirit and meaning of the conditions and have been ordered in writing by NIA / Architect (authorised official)
8. Before filling the Tender the Contractor will check all drawing and schedule of quantities and will get an immediate clarification from Architect / NIA as required on items not clearly understood. Any claim for any loss or compensation will not be entertained on this account.
9. The rates quoted by the Contractor shall be for finished work measured in site and should include supply of all materials labour, tools tackles, marking out and clearing of the site and liaison charges, with licensed plumbers for preparing plans, line out permission from Municipal Corporation, Statutory bodies etc. unless specifically mentioned otherwise. **The rates shall be exclusive of all taxes such as GST & other Tax if any**
10. The rates quoted by the Contractors should also include for providing all scaffolding, hoists, tackle and other plant, shuttering profiles and apparatus generally required for the proper execution of the work. The contractors shall provided without extra charges all labour and apparatus required by NIA for testing and measuring the works and for weighing measuring, providing or testing the efficiency of any portion of the works and shall also at his own cost provide all planking gang ways, etc. necessary for affording access to every part of the works.
11. The rates quoted by the Contractor should cover for necessary transport of materials from place of availability to the site of works.
12. The Contractor is expected to quote rate for each item after careful analysis of cost involved for the performance of the completed item considering all specifications and conditions of contract. This will avoid loss of profit or gain in case of curtailment or change of specification for any item. **In case it is noticed that the rates quoted by the tenderer are Abnormally Low Rate (ALR). Analysis for rates will have to be furnished by the tenderer on demand, to satisfy NIA about the reasonableness of the rates. NIA may demand additional security deposit for such ALR items in form of Bank Guarantee for difference of amount i.e. estimated rate minus quoted rates. Such additional SD shall be released on successful completion of project and certificate is issued thereof.**

## E. EXTRA ITEMS

1. The NIA (authorised official) shall have power to make any alterations in, omission from, addition to or substitutions for the schedule of rates the original specifications, drawings, designs and instructions that may appear to him to be

necessary or advisable during the progress of the work and the Contractor shall be bound to carry out the such altered / extra / new items of work in accordance with any instructions which may be given to him in writing signed by the NIA, and such alterations, omissions, additions or substitutions shall not invalidate the contract and any altered additional or substituted work which the contractor on the same conditions in all respects on which he agreed to do the main work. The time for completion of work may be extended for the part of the particular job at the discretion of the NIA, for only such alternations, additions or substitutions of the work, as he may consider as just and reasonable. The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions. :-

- a. If the rates for the additional, altered or substituted work are specified in the contract for the work, the contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract.
  - b. If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for similar class of work as are specified in the contract for the work. The opinion of the Architect / NIA, as to whether or not the rates can be reasonably so derived from the items in this contract, will be final and binding on the contractor.
  - c. If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub clause (a) & (b) above, then the contractor shall, within 7 days of the date of receipt of order to carry out the work, inform the NIA / Architect (authorised official) of the rate which it is his intention to charge for such class of work, supported by analysis of the rate or rates claimed, based on standard market rate analysis hand book published by NBO, and the NIA / Architect shall determine the rates on the basis of the prevailing market rates of materials, transport and labour plus 15% for overheads and contractor profit and pay the contractor accordingly. The opinion of NIA / Architect (authorised official) as to current market rates of materials and labour involved will be final.
2. Architect / NIA (authorised official) shall issue instructions to the contractor in regard to what is to be done concerning on object reported by the contractor under the proceeding sub clause and such instruction may be required to contractor to permit the examinations, excavations, or removal by a third party. Architect / NIA (authorised official) may issue instructions to the contractor in regard to be removal and disposal of the same at the expenses of NIA If in the opinion of the Architect / NIA, the above activity has involved the contractor indirect loss of time the NIA / Architect may allow extension of time for the completion of work equal in period to assessed loss of time on this account. The contractor shall not be eligible to claim any financial compensation due to any delay caused in this account.
  3. NIA shall have the right to direct the contractor to purchase and use materials from any source for the proper execution of work.
  4. Except if and to the extent otherwise provided by the contract, the provision of the General conditions of contract and special conditions shall prevail over those of any other documents forming part of the contract. Several documents forming the contract are to be taken as mutually, explanatory. Should there be any discrepancy inconsistency error or omission in the contract or any of them the matter may be referred to Architect / NIA who shall give his decisions and issue to the contractor instructions directing in what manner the work is to be carried out. The decision of the Architect / NIA (authorized

official) shall be final and conclusive and the contractor shall carry out work in accordance with this decision.

5. Works shown upon the drawing but not mentioned in the specifications or described in the specifications without being shown on the drawings shall nevertheless be held to be included in the same manner as if they had been specifically shown upon the drawings and described in the specifications.
6. NIA reserves the right to accept or reject any or all the tenders without assigning any reasons. In other words, NIA do not bind themselves to accept the lowest of any tender.
7. Tender submitted by tenderer shall remain valid for acceptance for a period of 120 days from the date of opening of the tender. The tenderer shall not be entitled during the said period of 120 days, without the consent in writing of NIA to revoke, or cancel his tender. In case of revoking or cancelling his tender, varying any terms in regard whereof without the consent of NIA in writing the tenderer shall forfeit earnest money paid by him along with the tender.
8. In case of discrepancies between schedule of quantities, the specifications and or the drawings thereof, the following order of preference shall be observed.
  - i. Descriptions in Schedule of Quantities.
  - ii. Particular specification and special conditions, if any.
  - iii. Drawings:

In any case the most stringent of the above three shall apply. The decision of the NIA / Architect in this regard is final.

In case of varying or conflicting provisions made in any one document forming part of the Contract NIA shall be the deciding authority with regard to the intentions of the documents.

9. Any error in descriptions, quantities or rates in schedule of quantities or any omissions there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the work comprised therein according to drawings and specifications or from any of his obligations under the contract.

## **F. PAYMENT TERMS**

1. In case of final bill the payment period will be 60 days, after all documents regarding reconciliation of NIA issued materials, guarantees for anti-termite treatment & water proofing treatment, detailed rate analysis of extra items if any (duly approved by the Architects & NIA, statement for payments at reduced rates, statement for deductions for any other reason are submitted by the contractor and they are duly approved / accepted by NIA.
2. Income tax / cess / taxes / other / statutory levies if any shall be deducted from every running bills and final bill payment as applicable from time to time as per Government of India / State Government.
3. All running bills as well as final bills submitted in approved proforma shall be submitted to the Architect by the contract or in quadruplicate for certification. All the bill copies shall be accompanied by measurement sheets and quantity calculation in support of the quantities contained in the bill with soft & hardcopies.

4. All the works in progress will be jointly measured by the representative of NIA and the contractor progressively. Such measurements will be got recorded in the measurement book by the NIA / Architect or his authorities representative and signed in token of acceptance by the contractor or his authorized representative.
5. All items having a financial value shall be entered in the measurement books, level book etc. prescribed by NIA that complete record is obtained of all work performed under the contract.
6. For the purpose of taking joint measurements the contractor's representative shall be bound to be present whenever required by the Architect. If, however, he absents for any reason whatsoever the measurements will be taken by the NIA / Architect or his representative and these will be deemed to be correct and binding on the contractor.
7. The contractor shall without extra charges provide assistance with every appliance, labour and other things necessary for measurement of work.

**G. METHODS OF MEASUREMENTS:**

1. Except where any general or detailed description of work in quantities expressly shows to the contrary schedule of quantities shall be deemed to have been prepared and measurements shall be taken in accordance with the procedure laid forth in specifications notwithstanding any provisions in the relevant standard method of measurement or any general or local custom. In the case of items which are not covered by the specifications, measurements shall be taken in accordance with the relevant and latest standard method of measurement issued by the Bureau of Indian Standards. (All Measurements will be noted as per actual without any rounding off)

**H. DEFECT LIABILITY PERIOD (DLP)**

1. The contractor shall **guarantee the installation/work for a period of 12 months from the date of issue of completion certificate**. Any damage or defect that may arise or lie undiscovered at the time of issue of completion certificate, connected in any way with the equipment or materials supplied by him or in the workmanship shall be rectified or replaced by the contractor at his own expense as deemed necessary by NIA or in default, NIA may cause the same to be made good by other workmen and deduct expenses (of which the certificate of NIA shall be final) from any sums that may be the or at any time thereafter, become due to the contractor or from his security deposit, or the proceeds of sale thereof, or of a sufficient portion thereof.
2. At the end of the defects liability period the contractor shall submit a written application for release of retention money. NIA shall release the money only after ensuring that all the defects pointed out by NIA/Architect till completion of DLP have been rectified by the contractor satisfactorily.
3. Any amount found due from the contractor to NIA from time to time will be recovered currently from the running bills. Similarly if, at any time, should there evidence of any lien or claim for which NIA might have become liable and which is chargeable to the contractor, NIA shall have the right to retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify NIA against such lien or claim and if such lien or claim remain unsettled after all payments are made, the contractor shall refund or pay to the owner all money that the latter may be compelled to pay in is charging such lien or claim including all costs reasonable expenses.



4. The contractor will be fully responsible for rectifying any defects brought to his notice by NIA / project Architect in writing within **seven days of receipt of the intimation**. In case the contractor fails to attend to defects as stipulated therein, NIA reserves the right to complete the rectification through another agency of its choice and recover the cost of such repairs from the contractors dues against running bills/ final bill / retention money for this or any other job.

## **I. SECURITY DEPOSIT**

1. On acceptance of the tender, **the successful tenderer shall, within the time stipulated in the letter of intent, deposit with the Employer either Demand Draft, such further sum, as along with the earnest money paid by the contractor, will amount to 5% (Five percent) of the value of the contract**, before he is allowed to execute the contract and commence work.
2. Failure to deposit this additional amount, within the stipulated time which shall include any extension granted by the Employer at its discretion, will make the earnest money deposited by the tenderer liable to forfeiture and the acceptance of his tender shall be considered as withdrawn.
3. As and by way of additional security from every progressive on account of bill of the contractor, 5% (Five percent) of the value of the work executed, shall be deducted and kept as security deposit until the total amount so deducted plus the initial security (including the Earnest Money) already deposited will equal the prescribed security, which is 10% (ten percent) of the value of the contract.
4. **Such deposit shall be released after expiry of Defect Liability Period subject to there is no rectifications are required in executed works.**

## **J. LIABILITY FOR DAMAGE, DEFECTS AND RECTIFICATION THEREOF**

1. If the Contractor or his workmen or employee shall injure or destroy any part of the building in which they may be working or any building road, fence etc., contiguous to the premises on which the work or any part of it is being executed or if any damage shall happen to the work while in progress, the contractor shall upon receipt of a notice in writing in the behalf make the same good at his own expenses. If it shall appear to the NIA / Architect or his representative at any time during the construction or re-construction or prior to expiration of defects liability period that any work has been executed with unsound, imperfect or unskilled workmanship or that any materials or articles provided by the contractor for execution of the work are unsound or of a quality inferior to that contract for, or otherwise not in accordance with the contract or that any defect, shrinkage or other faults have appeared in the work arising out of defective or improper materials or workmanship, the contractor shall upon receipt of a notice in writing in that behalf from the Architect / NIA forthwith rectify or remove or reconstruct the work so specified in whole or in part as the case may require or as the case may be and / or remove the materials or articles so specified and provide other proper and suitable material or article.
2. At his own expenses, notwithstanding that the same may have been inadvertently passed, certified and paid for and in the event of his failing to do so within the period to specified by the NIA / Architect may rectify or remove and re execute the work and / or remove and replace with other, materials or articles complained of, as the case may be by either means at the risk and expense of the Contractor.
3. In case of repairs and maintenance works, splashes and droppings from white washing, painting etc., shall be removed and surface cleared simultaneously with

completing of these items of work in individual rooms, quarters or premises etc., where the work is done without waiting for completion of all other items of work in the contract. In case the contractor fails to comply with the requirement of this condition the Architect / NIA shall have the right to get the work done by other means at the cost of the Contractor. Before taking such action, however, the NIA / Architect (authorized official) shall give three days' notice in writing to the contractor.

#### **K. OVER PAYMENTS AND UNDER PAYMENTS:**

1. Wherever any claim for the payment of a sum of money to NIA out of or under this contract against the Contractor the same may be deducted by NIA from retention money / Security deposit or any sum then due or which at any time thereafter may become due to the contractor under this contract and failing that under any other contract with NIA or from any other sums due to the contractor from NIA which may be available with NIA he shall pay within ten days the claim in cash / Demand Draft on demand.
2. NIA reserves the right to carry out post payment audit and technical examinations of the Running / final bill including all supporting vouchers, abstracts etc. NIA further reserves the right to enforce recovery of any overpayments when detected, notwithstanding the fact that the amount of the final bill may be included by one of the parties as items of disputes before an arbitrator appointed under condition of this contract and notwithstanding the fact that the amount of the final bill figures in the arbitration award.
3. If as a result of such audit and / or technical examinations any overpayments is discovered in respect of any work done by the contractor or alleged to have been done by him under the contract it shall be recovered by NIA from the Contractor by any of all methods or made of recovery as prescribed above or if any under payment is discovered, the amount shall be duly paid to the contractor by NIA.

#### **L. COMPLETION PERIOD AND COMPENSATION CLAUSE**

1. The Contractor shall commence work within 7 days from the date of receipt of letter of intent / email from NIA confirming that the purchase order is being awarded to him. The formal purchase order will be typed and mailed in due course after the letter of intent. The contractor will be required to submit the security Deposit within 7 days from the date of receipt of LOI if it has not been done earlier.
2. Completion period for the entire work contained in the tender and such of the extra items, if any, which form an integral part of the contract, contained in the tender is **60 days from** the date of commencement of work at site as specified in above. The time limit specified herein will be strictly adhered to and will form the essence of the Contract. 1% of total contract value per week up to a maximum of 5%, thereafter the owner may get the work done at contractor's risk and cost.
3. The successful contractor will be required **to submit PERT / CPM analysis** of the entire work within 10 days of issuing the LOI showing completion period as **30 days**. Progress of the work shall be checked with the PERT / CPM analysis at various stages of completion. NIA shall have the right to terminate the contract ex-party if progress of the work is found to be unsatisfactory and there are no efforts from the contractor's side to make up for the delays if any.

## M. COMPLETION CERTIFICATE

1. The work shall be considered “Virtually Complete” only after the Contractor submits to Architect / NIA the following documents obtained by him through his licensed plumber / Licensed electricians.
  - a. As soon as the work is completed the contractor shall give notice of such completion to Architect / NIA and within thirty day or receipt of such notice,  
  
Architect / NIA shall inspect the work and shall furnish the contractor with a certificate of completion indicating.
    - i. The date of completion.
    - ii. Defects to be rectified by the Contractor and /or.
    - iii. Items for which payment shall be made at reduced rates.
2. When the separate periods of completion have been specified for items or groups of items, Architect / NIA shall issue separate completion certificate for such item or group of items. No certificate of completion shall be issued, nor shall the work considered to be complete till the contractor shall have removed from the Employers premises on which the work has been executed all scaffolding, sheds, temporary structures and surplus materials except such as are required for rectification of defects, removal all huts and sanitary arrangements required for his workmen on the site in connection with the execution of work as such have been erected by the Contractor or the workmen and clear all dirt from all parts of the building (s) in upon or about which the work has been executed thereof and clean floor, all gutters and drains, ease doors and shutters, oil locks and fastenings, labeled keys clearly and handed them over to the NIA or his representative and made the whole premises fit for immediate occupations or use to the satisfaction of the NIA.
3. If the contractor shall fail to comply with of the requirements of these conditions as aforesaid on or before the date of completion of the works, NIA may at the expense of contractor arrange to remove scaffoldings, surplus materials and rubbish etc., as he thinks fit and the contractor shall have no claims in respect of any such scaffolding or surplus materials except for any sum actually realized by the sale there of less the cost of fulfilling to requirements any other amount that may be due from the contractor. If the expense of fulfilling such requirements is more than the amount realized on such disposal as aforesaid the contractor shall forthwith on demand pay such excess?
4. The whole of the work including all extra and additional items if any and when ordered are to be completed in the time stated in the contract and the contractor will be required if necessary to work overtime to stick to NIA requirements to complete all the works by the stipulated date. No extra claim for extension of completion period will be allowed on account of this factor.
5. The completion period of the entire work as stated above shall be deemed to be the essence of the contract. In case of delay in completing the work beyond the specified completion date the contractor will be required to pay a penalty at the rate of 1% of the total contract value per week subject to maximum of 5% of the actual cost of the project, there after the owner may get the work done at contractor’s risk. The penalty will be recovered either from the contractor’s bills or from the Security Deposit / Retention Money.
6. In case of delay of over 5 weeks in completion of the work beyond a stipulated completion date, NIA reserves the right to terminate the contract and get all the jobs completed through another agency of its choice. Any extra expenditure that NIA will have to incur for

completion of the balance jobs through another agency on account of higher rates quoted by the agency will be recovered from the contractor's Security Deposit, Retention Money and pending bills.

#### **N. Extension of completion period**

If the work is delayed by

- a) Force Majeure
- b) Serious loss or damage by fire or
- c) Civil commotions, local combinations of workmen, strikes or lockout affecting any of the trades employed on the work, or
- d) Delay on the part of other contractors or tradesman engaged by NIA in executing work not forming part of contract.
- e) Non – availability of stores, which are the responsibility of NIA to supply.
- f) Non-availability or breakdown of tools and plant to be supplied or supplied by NIA.

Request for extension of time to be eligible for considerations, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay. The contractor may also if practicable, indicate in such a request the period for which extension is desired. In any such case NIA may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by NIA in writing within one month of, the date of receipt of such request by NIA.

### **SITE FACILITIES**

#### **A. SETTING OUT OF WORK**

1. The NIA / Project Architect shall supply dimensioned drawings levels and other information necessary to enable the Contractor to set out the works. The Contractor shall provide all setting out apparatus required and set out the works and be responsible for the accuracy of the same. He shall amend at his own cost and to the satisfaction of the NIA / Project Architect any error found at any stage which may arise thought inaccurate setting out unless such error(s) is / are based on incorrect data furnished in writing by NIA / Project Architect in which case the cost shall be on the account of NIA. The Contractor shall protect and preserve all bench marks liability period unless the NIA / Architect directs their removal.

#### **B. SITE DRAINAGE:**

1. All water which may accumulate on the site during the progress of works or in trenches and excavations from other than the expected risks shall be removed from the site to the

satisfaction of the NIA / Architect at the Contractor's expenses.

### **C. NUISANCE**

1. The contractor shall not at any time do cause or permit any nuisance on the site or do anything which shall cause unnecessary disturbance or inconvenience to others at or near the site of work.
2. The contractor shall all times give access to the staff of statutory bodies as well as other agencies associated with the project and shall provide them all facilities like scaffolding, water, lighting etc. At site for discharging their duties.
3. No residential accommodation provided to the workmen/labor at the site. NIA reserve the right for the same
4. The Contractor shall provide at his cost all temporary lighting arrangement required for the works and to enable contractors and sub-contractors to complete the works in the specified time including that for the workmen of any sub – contractors or special tradesmen.
5. NIA shall provide **Electricity power on non-chargeable basis** for the works mentioned in the tender at one point. The necessary all electrification, wiring, lighting arrangement (including separate meter installation) shall be made available by the contractor and for which contractor shall not be paid any charges for the same. Misuse of electricity power shall be charged as 0.1% of contract value.

### **D. WATCHING AND LIGHTING:**

1. The contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and wherever necessary or required by the NIA / Project Architect for the protection of the works or for the safety and convenience of those employed on the works or the public.

### **E. EQUIPMENT & STAFF ASSISTANCE FROM THE CONTRACTOR**

1. Theodolite, levels, plumb bobs, prismatic compass, chain, steel and metallic tapes and all other surveying instruments found necessary on the works shall be provided by the Contractor for the due performance of their contract as instructed by NIA. The NIA / Architect will use any or all measurement instruments or tools belonging to the Contractor as and when he chooses for checking the complete works as well as the work in progress.
2. All scaffolding and ladders that may be necessary for taking measurement at site will be provided by them Contractor.
3. The Contractor shall provide the following minimum equipment and machinery in good working condition at site during the entire period of construction/renovation as and when required.
4. The Contractor will be allowed to work for 8 (Eight) hours a day and 7 (Seven) days a week. However, no concreting shall be done during night or in the absence of the NIA / Architect. For working beyond normal working hours the Contractor shall obtain prior permission from the NIA /Architect.

# EXECUTION

## A. Admission to Site :

1. The Contractor shall not be permitted to enter on (other than for inspection purposes) or take possession of site until instructed to do so by the Architect / NIA in writing. The portions of the site to be occupied by the Contractor shall be defined and / or marked on the site plan failing which these shall be indicated by the NIA / Architect at site and the operations beyond the areas. In respect of any land permitted by NIA for the use of the Contractor for the purpose of or in connection with the contract. The same shall be subject to the following and such other terms and conditions as may be imposed by NIA.
2. The use or occupations shall not confer any right of tenancy of the land to the contractor.
3. The Contractor shall have no right to put up any constructions of his own of any nature or type on NIA land except temporary constructions for storage of equipment for the work under the contract or as a resting place for labourers employed by him for the work provided that he obtained the requisite previous permission in writing from NIA or from the Architect in accordance with NIA procedure which permission they would be entitled to refuse in their absolute discretion. Such construction will be erected at the contractor's own cost.
4. If any electricity is used in any of such constructions the Contractor shall himself pay for the same. The Contractor shall at his own cost demolish all such constructions and remove the debris thereof, as also all his materials and equipment's and clean and level the site thereof before handing over the completed work to NIA.
5. The Contractor shall provide if necessary or if required on the site all temporary access thereof and shall alter adapt and maintain the same as required from time to time and shall take up and clear them away as and when no longer required and as and when ordered by the NIA / Architect and made good all damages done to the site. The Contractor shall note that the final bill will not be certified for the payment till the action as above is completed by the Contractor to the entire satisfaction of the NIA / Architect (Authorised official)
6. All the work shall be carried out as per detailed drawings and instructions of the Architect / NIA (Authorised official)
7. All drawings, tracings, photo prints and writings (except letter) shall be the sole property of Architect / NIA and must be returned to them on completion of the works.
8. The drawings maintained on the site are to be carefully mounted on boards of appropriate size and covered with a coat of approved varnish. They are to be protected for ravages of termites, ants, silver fish and other insects.
9. The completion of the work may entail working in the monsoon also.
10. The contractor must maintain a minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered for such work in monsoon.
11. During the execution of the work, Contractor must check his work with the drawings. The Contractor shall be responsible for all the errors in this connection and shall have to rectify all defects and / or error at his own cost, failing which NIA reserves the right to get the same rectified at the risk and cost of the Contractor.

## **B. MATERIAL TO BE PROVIDED BY THE CONTRACTOR.**

1. The Contractor shall at his own expense and without delay supply to the NIA / Project Architect, samples of materials proposed to be used in the work. The NIA / Project Architect shall within 15 days of supply of samples or within such period as he may require intimate to the Contractor in writing and inform the Contractor whether samples are approved by him or not. If the samples are not approved, the Contractor shall forthwith arrange to supply to the NIA / Project Architect for his approval fresh samples complying with the specification laid down in the contract. A set of all approved samples shall be maintained at site under lock & key by the Architect / NIA.
2. Architect / NIA shall have full power to require removal of any or all the materials brought to the site by the Contractor which are not in accordance with the contract specifications or do not conform in character or quality to sample approved by him. In case of default on the part of the Contractor in removing rejected materials, the Architect / NIA shall be at liberty to have them removed by other means. The Architect / NIA shall have full power to procure other proper materials and in the event of the Contractor refusing to comply, he may cause the same to be supplied by other resources. All costs which may attend upon / incurred upon such removal and / or substitution shall be borne by the Contractor.
3. The Contractor shall indemnify NIA or any employee of NIA against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent design rights and shall pay any royalties or other charges which may be payable in respect of any articles or materials or part thereof included in the contract. In the event of any claim being made or action being brought against NIA or any agent, servant or employees of NIA in respect of any such matters as aforesaid the Contractor shall immediately be notified thereof.
4. NIA / Project Architect shall be entitled to have **tests carried out as specified in the contract for any materials supplied by the Contractor**, other than those for which as stated above, satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities which the NIA / Project Architect require for the purpose. IF no tests are specified in the contract and such tests are required for the purpose and the charges for these tests shall be borne by the Contractor only. The cost of materials consumed in the test shall be borne by the Contractor in all cases except when other wise provided.
5. Representative of NIA connected with the contract, shall be entitled at any time to inspect and examine any materials intended to be used in or on the work, either on the site or at factory or workshop or at other place (s) manufactured or at any places where these are laying or from which these are being obtained and the Contractor shall give such facilities as may be required for such inspection and examination.
6. Trees designated by the NIA / Project Architect shall be protected from damages during the course of the works and earth level within 1 metre of each such tree shall not be damaged, when necessary such trees shall be protected by providing temporary fencing.

## **C. LABOUR**

1. The Contractor shall employ labour in sufficient number either directly or through sub – contractors when such subletting is permitted to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the NIA / Architect. The Contractor shall not employ in

connection with the works any person who has not completed his Eighteenth year of age.

2. In case of any class of work for which there is no such specification supplied by NIA as is mentioned in the tender documents, such work shall be carried out in accordance with Indian Standard Specifications and if the Indian Standard Specifications do not cover the same the work should be carried out as per standard Engineering practice subject to the approval of the Architect /NIA.
3. The contractor shall on the written request of NIA / Architect immediately dismiss from the works any person employed by him therein who may in the opinion of NIA be incompetent or misconduct himself and such person shall not again be employed on the works without the written permission of NIA/Architect(authorized official)
4. The Contractor or his agent shall be in **attendance at the site (s)** during all working hours and shall supervise / superintend the executions of works with such additional assistance in each trade as the NIA / Architect may consider necessary. Order given to the Contractor agent shall be considered to have the same force as if they have been given to the Contractor himself.
5. Architect / NIA shall communicate or confirm his instructions to the Contractor in respect of the executions of work in a “**work site order book**” maintained in the office authorized representative shall confirm receipt of such instructions by signing the relevant entries in the book.
6. Any instructions issued by the Architect / NIA orally, shall be of no immediate effect but shall be confirmed in writing by the Contractor to the site NIA / Architect within seven days and if not dissented from in writing by the Architect / NIA to the Contractor within 7 days from receipt contractor’s confirmation shall take effect as from the expirationofthelettersaid7daysofgivingsuchoralinstructionsshall himself confirm the same in writing, then the Contractor shall not be obliged to confirm as aforesaid and the said instruction shall take effect as from the date of NIA / Architect confirmation and provided that if neither the Contractor nor the Architect / NIA shall confirm such oral instructions in the manner and at the time aforesaid but the Contractor shall nevertheless comply with the same then the Architect / NIA may confirm the same in writing at any time prior to the issue of the Final certificate and the said instructions shall thereupon be deemed to have taken effect on the date on which it was issued.
7. The Contractor shall provide and do everything necessary for the proper execution of the works according to the true intent and meaning of the drawings and specifications taken together, whether the same may or may not be particularly shown on the drawings, or described in the Schedule of Quantities, provided that the same can be reasonably inferred therein from. Figured dimensions and all dimensions and particulars to be taken from the actual work.
8. The whole of the work must be proceed with such sections and at such times as directed by NIA
9. Architect / NIA (authorized official) may from time-to-time issue further drawings or written instructions which are hereafter collectively referred to as ‘Architect’s Instructions’ in regard to:
  - i. The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work.
  - ii. Any discrepancy in the drawings or between the schedule of quantities and / or drawings and / or specifications.
  - iii. The removal from the site of any materials brought thereon by the contractor and the substitution of any material there for.
  - iv. The removal or re-execution or both of any works executed by the Contractor.
  - v. The dismissal from the works of any persons employed thereupon.



- vi. The opening up for inspection of any work covered up.
  - vii. The amending and making good of any defects of works improperly carried out.
10. The contractor shall forthwith comply with and execute any work comprised in such Architect's Instructions. Any instructions given verbally shall be deemed as instructions for the proper execution of the works as long as they do not involve any extra charges.
  11. If the Contractor after receipt of written notice from the Architect / NIA requiring compliance within seven days fails to comply with such drawings or Architect instructions or both as the NIA / Architect may issue, NIA may employ and pay other persons to execute any such drawings or Architect instructions and all cost incurred in connection therewith as certified by the Architect shall be borne by the Contractor or may be deducted from any amount due or that may become due to the contractor under the contract or may be recovered as a debt.

**D. INSPECTIONS AND APPROVALS:**

1. All works embracing more than one process shall be subject to examinations and approval at each stage thereof and the Contractor shall give due notice to the NIA / Project Architect shall be entitled to appraise the quality and extended thereof.
2. No work shall be covered up or put out of view and without approval of Architect NIA or his authorized representative and the Contractor shall afford full opportunity for examination and measurement of any work which is about to be covered up or put out of view and for examination or foundations before permanent work is placed thereon. The Contractor shall give due notice to the NIA / Project Architect or his authorized representative wherever any such work or foundation is ready for examination and the NIA / Project Architect or his representative shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examination and measuring such work or of examining such foundation he shall, if Required by the NIA / Project Architect uncover such work at the Contractor's expenses.
3. Duties and powers of NIA / Project Architect and his authorized representative and other officers of NIA. The duties of the representative of the NIA / Project Architect are to watch and supervise the progress of works and to test and examine any materials to be used or workmanship employed in connection with the works. They shall have no authority to order any work involving any extra payment by NIA or to make any variations in the works except when authorized by the NIA. The NIA / Architect may from time to time in writing delegate to his representative any of the powers and authorities vested in him and shall furnishes to the contractor a copy of all such written delegation of powers and authorities. Any written instructions of written approval given by the representative of NIA / Architect to the Contractor within terms of such delegations shall bind the Contractor and NIA as though it had been given by the NIA / Architect.
4. Failure of the representative of Architect to disapprove any work or materials shall not prejudice the power of the NIA / Architect thereafter to disapprove such work or material and to order pulling down removal or breaking up thereof.
5. If the Contractor shall be dissatisfied with any decisions of the representative of the

Architect / NIA he shall be entitled to refer the matter to the Architect / NIA who shall thereupon confirm, reverse or vary such decisions.

6. The whole of the materials (except where otherwise described), stores and equipment required for the faithful performance of the contract must be provided through normal trade channel, and must be the best of their kind available at the time and the Contractor must be responsible for the proper and efficient carrying out of the work. The work must be done in best and most work men like manner. Samples of all materials to be used must be submitted to the Architect / NIA on the site for approval prior to procurement. The Contractor shall furnish to the Architect / NIA for approval when requested or if required by the specifications, adequate samples of all materials and finished to be used in the work. Such samples shall be submitted before the work is commenced and in ample time to permit tests and examinations thereof. All materials finished and applied in actual work shall be fully equal to the approved samples.
7. During inclement weather the Contractor shall suspend concreting and plastering for such time as the Architect / NIA may direct and shall protect from injury all works in the course of erection.
8. Should the work be suspended by reason of rain, strike, lockouts or other cause the Contractor shall take all precautions necessary for the protection of the work and at his Own expense shall make good any damages arising from any of these causes.
9. The Contractor shall keep accurate records of weather, temperature, visitors and any other occurrences affecting the progress or quality of the works.
10. All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of the works and at completion including that of sub – Contractor and specific tradesman to be cleared and carted away and all materials condemned by the Architect / NIA shall be removed from site as and when required during the entire duration of the work at no extra cost.
11. The Contractor shall protect all projecting eills and moldings and all concrete steps from injury during the progress of the work by rough timber casings securely fixed.
12. The Contractor shall provide all necessary templates, molds for circular or shaped work, carpenters or joiners work or any other trade.
13. The Contractor shall protect joinery and make good all damages to the same from any cause whatsoever during the performance of the contract and leave perfect to the satisfaction of the Architect / NIA at the time of completion. Before giving up possession, the contractor must see that all doors sashes etc. Work easily and shall make all necessary adjustments.
14. The Contractor shall provide suitable stone with flat tops and build the same in concrete for temporary bench marks. All the pegs for setting out the work and fixing the necessary levels required for the execution thereof shall if desired by the Architect / NIA like wise be built in masonry at such places and in such manner as NIA may determine.
15. Particular care must be taken to see that the floors are not overloaded by stacks of materials during construction. It is important that no load comes on the reinforced concrete floors until they are at least 3 weeks old and at no time must the load placed upon them exceed the load for which they are designed

16. The Contractor has to provide all necessary holes, slits and depression etc. in form work and concrete to place pipelines or ancillary services in any form as shown in the drawings or as directed by NIA
17. The Contractor shall cover up and protect from injury from any cause all new work also for supplying all temporary doors, protection to windows and any other requisite protection for the whole of the works executed whether by himself or specified tradesmen or sub-contractors and any damage caused must be made good by the contractors at his own expenses.
18. The Contractor shall provided temporary teakwood barricading up to 4' 0" height from the floor level to all lift walls and / or shafts opening on all floors to safeguard against any accidental fall and maintain them till such time as permanent enclosures are installed. No extra payment will be allowed on the contract sum for complying with this clause.

## **E. STATUTORY**

1. The contractor shall conform to the provisions of any regulations and by – laws of any water or lighting companies with whose system the structures are proposed to be connected and shall before making any variations from the drawings that may be necessitated by so conforming give to the Architect / NIA on site written notice specifying the variations proposed to be made and the reason for making to and apply for instructions thereon. In case the contractor shall in due course receive instructions, he shall proceed with the work, conforming to the provision regulations or by-laws to the supply companies and shall provide for and pay all fees and charges.
2. The contractor will be fully responsible for complying with all relevant provisions of the Contractor Labour Act and shall pay rates of Wages and observe hours of work/ conditions of employment according to the rules in force from time to time.
3. The contractor shall comply with provisions of payment sperthe following acts : Payment of wages Act,1936, Workmen’s Compensation Act,1923 Industrial Dispute Act, 1947 Minimum Wages Act, 1948 Employees State Insurance Act, 1948 Maternity Benefit Act, 1961, Mines Act, 1952 or
4. Any amendments / modifications thereof or any other law relating thereto and rules made there under from time to time. NIA / Architect shall on a report having being made by an inspecting office as defined in the contract labor regulations have the power to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker (s) by reasons of no – fulfillment of conditions of contract for the benefit of workers no – payment of wages or of deductions made from his or their wages which are not justified by the terms of contract or non-observance of the said contractor’s labour Regulation.
5. The contractor shall pay to labour employed by him, and in the case of his giving any part of the work on sub – contract he shall ensure and be responsible to see that the sub – contractor pays to labour employed by such contractor, wages not less than wage or remuneration as provided in the contract labour (Regulations and Abolition Act) and in the Rules, Regulations and orders.
6. The Contractor shall indemnify the NIA against any payments to be made under and for observance of the Regulations aforesaid without prejudice to his rights to claim indemnity from his sub - contractor.

## **F. SAFETY CODE:**

1. The Contractor shall at his own expenses arrange for the Safety provisions as amended to these conditions or as required by the NIA / Architect in respect of all labours directly or indirectly employed for performance of the works and shall provide all facilities in connections therewith. In case the contractor fails to make arrangements and provide necessary facilities as aforesaid, the NIA / Architect shall be entitled to do so and recover the cost thereof from the Contractor. Safety precaution to be taken in all respects (till completion of works) including for all concern human being. The contractor shall be responsible for any damage or loss of part / limb or death human being.
2. From the commencement to the completion of the works, the contractor shall take full responsibility for the care thereof and of all the temporary works (defined as meaning all temporary works of every kind required in or for the execution, completion or maintenance of the works). In case damage, loss or injury shall happen to the works or to any part thereof or to temporary works or to any cause whatsoever (save except the Expected Risks as defined in) repair at his (Contractor's) own cost and make good the same so that at the time of completion, the works shall be in good order and condition and in conformity in every respect with the requirements of the contract and NIA instructions. In the event of any such damage, loss or injury happening from any of the Expected Risks the contractor shall if any to the extent required by NIA repair and make good the same as aforesaid at the cost of NIA.

## **G. INSURANCES**

1. The Insurance for the following will be covered and paid for by the contractor, and contractor shall indemnify the NIA and hold the NIA harmless in respect of all and any expenses arising from any such injury and / or damages in respect of:
  - a. Workmen's Compensation and Risk of Accidents to contractor's own employees.
  - b. Contractors all risk Insurance to cover the total cost of project with third party coverage.
2. The contractor has to insured building/site under construction/renovation till completion and it should be place to be employer in the name of the NIA. Contractor shall submit the copy of policy details within 15 days of receipt of LOI/Work order.
3. If the contractor and / or his sub-contractor fails to effect and keep in force the Insurance referred to above or elsewhere in the contract or any other insurance which he may be required to effect and keep in force, NIA reserves the right to keep in force and such insurances and pay such premium or premia as may be necessary for the purpose and from time to time deduct the amount so paid by NIA as aforesaid from any moneys due or which becomes due to the contractor or recover the same as a debt from the contractor.
4. The aforesaid insurance policy / policies shall not be cancelled till the Architect / NIA has agreed to their cancellation.
5. The Contractor shall prove to the Architect / NIA from time to time that he has taken out all insurance policies referred to above and has paid the necessary premium for keeping the policies alive till the expiry of the defects liability period.
6. The contractor shall ensure that similar insurance policies are taken out by his sub- contractor (if any) and shall be responsible for any claims of losses to NIA

resulting from their failure to obtain adequate insurance protections in connection thereof. The contractor shall produce or cause to be produced by his sub – contractor (if – any) as the case may be, the relevant policy or policies and premium receipts as and when required by the Architect /NIA.

#### **H. NOTICE TO LOCAL BODIES.**

1. The contractor shall comply with and give all notices required under any Government authority, instrument, rule or order made under any act of parliament, state laws or any regulations or by-laws of any local authority relating to the works. He shall before making any variations from the contract drawings necessitated by such compliance give to the NIA / Architect a written notice giving reasons for the proposed variations and obtain the Architect instruction therein.

#### **I. ARBITRATION**

1. All disputes or differences of any kind whatsoever which shall at any time arise the parties hereto touching them or concerning the work or execution or maintenance thereof this Contract or the construction operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination, foreclosure or breach of this contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract or the other of them and to the Appointing Authority who shall be appointed for this purpose by the Employer, be referred for adjudication to a sole arbitrator to be appointed as hereinafter provided.
2. For the purpose of appointing the sole Arbitrator referred to above, the Appointing Authority will send within thirty days of receipt by him of the written notice aforesaid to the Contractor, a panel of the three names of persons who shall be presently unconnected with the organization for which the work is executed.
3. The Contractor shall on receipt by him of the names as aforesaid, select any one of the persons named to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within thirty days of receipt by the names. The Appointing Authority shall thereupon without any delay appoint the said person as the sole Arbitrator, if the Contractor fails to communicate such selections as provided above within the period specified, the appointing authority shall made the selection and appoint the selected person as the sole Arbitrator
4. If the appointing Authority fails to send the Contractor the panel of three names as aforesaid within the period specified, the Contractor shall send the Appointing Authority a panel of three names of persons who shall be unconnected with either party. The Appointing Authority shall on receipt by him of the names as aforesaid select any one of the persons named and appoint him as a sole Arbitrator. If the Appointing Authority fails to select the person and appoint him as the sole Arbitrator within 30 days of receipt by him of the panel and inform the Contractor accordingly, the Contractor shall be entitled to appoint one of the person from the panel as a sole arbitrator and communicate his name to the Appointing Authority.

5. If the Arbitrator so appointed is unable or unwilling to act or resign his appointment or vacate his office due to any reason whatsoever another sole arbitrator shall be appointed as aforesaid.
6. The work under the Contract shall, however continue during the Arbitration proceeding and no payment due or payable to the Contractor shall be withheld notice on account of such proceedings.
7. The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing.
8. The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the Award.
9. The Arbitrator shall give a separate award in respect of each dispute in accordance with the terms of the Contract and give a reasonable award.
10. It is also a term of the Contract that if Contractor (s) do/does not make any demand for arbitration in respect from the Clients / Architects that the bill after due verification is passed for payment of a lesser amount, or otherwise, the arbitration shall be deemed to have been forfeited and Client / Architects shall be relieved and discharged of their liability under this agreement in respect of such claim(s). Further, it is agreed that for the purpose of this clause such notice is deemed to have been received by the Contractor(s) within 2 days of posting of the letter by Clients / Architects or when delivered by hand immediately after receipt thereof by the Contractor(s), whichever is earlier. Further, a letter signed by the officials of Clients / Architects that the letter was so posted to the Contractor(s) shall be conclusive.
11. The Fees, if any of the Arbitrator shall, if required be paid before the award, be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any of 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 the amount of costs to be so paid.
12. The award of the Arbitrator shall be final and binding on both the parties.
13. Subject to a fore said, the provisions of the Arbitration and Conciliation Act 1996, or any statutory modification of 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.

## SPECIAL CONDITIONS OF CONTRACT

1. It shall be distinctly understood that notwithstanding the reviews and suggestion if any, by the NIA or Project Architect the sole and ultimate responsibility for the stability and performance of the form work and staging and all other temporary works shall be that of the Contractor.
2. The partners or Directors of the Contractor shall meet the officers of NIA or its consultants at the site of works or at their respective offices whenever requested to do so.
3. The Project Architect shall supply to the contractor reasonably complete engineering drawings. All **the drawings required for the complete execution** of the work shall be submitted by the Architect within 7 days of issue of work order. **Bar bending schedules and shop drawings** required for proper execution of work shall be prepared by the Contractor and submitted well in advance within 14 days of issue of work order to NIA and its Project Architect to permit scrutiny, corrections resubmissions and final approval without causing any delay in the construction/renovation work.
4. The Contractor shall confirm to the provisions of the Government Act relating to the work, and to the regulations and bye-laws of the local authorities. The contractor shall give all notices required by the said act, and obtain all required permission and license and pay all fees payable to such authorities in connection with constructing and maintaining temporary electric and water supply at site for the said project. All aspects of temporary works including their stability shall be the sole and ultimate responsibility of the Contractor.
5. NIA reserves the right to use the premises and any portion of site for execution of any work not included in this contract which NIA may desire to get executed by other agencies. The Contractor shall allow all reasonable facilities for the execution of such work but shall not be required to provide any plant or material for such work except by special arrangement with NIA in such a manner as not to impede the progress of the works included in this contract and the Contractor shall not be responsible for any damage or delay which may happen or be occasioned by such work.
  - i. In addition to previous stipulations, the Contractor shall be represented at site at all times during the tenure of the contract by responsible and qualified engineers approved by NIA Such engineer shall form the Contractor's Project Management & Site Supervisory Team. They shall be in constant attendance upon all activities of the work. Contractor's staff shall comprise of at least the following to be permanently on site for the entire duration of the project.
  - ii. Cost of recovery against materials, utilities or services supplied or arranged for by NIA shall be made by deducting the respective amount from the running as well as final bills.
6. Although Schedule of Probable Quantities & Rates has been divided into various subs – section, the rates quoted for a particular item of work in one sub –section shall

be made applicable to similar item of work in any other sub – section if that item is not listed in the Schedule of that other sub –section.

7. This project is subjected to inspection by various audit / vigilance agencies of Government of India / NIA if any inspection of works is carried out by such agencies contractor shall extend his full co-operation to these agencies in examining records, works etc. on inspection by such agencies, any and in their inspection report, if it is pointed out that Contractor has not carried out work according to guideline laid down in this tender documents and also if any recoveries in some items is pointed out therein, same shall be recovered from contractor's R. A. Bills / Final Bill. The items under dispute shall not be paid in full till inspection agency gives their no objection report.
8. This work being prestigious NIA, quality of materials & workmanship are expected from the contractor of very high standard.
9. The successful tenderer is bound to carry out any item of work up to any deviation in quantities, for the completion of the job.
10. The Electrical works is to be executed through licensee electrical contractor only.
11. Material testing report can be asked for by NIA. The contractor must cooperate with the employer (NIA) to make available such reports from the manufacturer of the material used in the tender with no extra cost.
12. NIA shall be the sole deciding authority on the brand and make of the materials to be used.



## SCHEDULE – F

1	Earnest Money Deposit	:	<b>Rs. 31,000/-</b>
2	Initial Security Deposit	:	5% of the total tendered amount inclusive of EMD
3	Defects Liability Period (DLP)	:	12 months from the date of issue of virtual completion certificate and handing over the completed work to owners
4	Period of commencement	:	7 days from the date of letter of intent / work order
5	Duration of completion of work	:	<b>30 days</b>
6	Liquidated damages at the rate	:	1% of total contract value per week up to maximum of 5%, there after the owner may get the work done at contractor's risk and cost i.e. beyond delay of 6 weeks
7	Retention money	:	a) 10% retention money to be kept from every running bill - to be released after completion of DLP b) Security deposit to be released on expiry of the defects liability period after rectification in executed works.
8	Terms of rate	:	The rates shall be at site of work and Should be excluding of GST
9	Period of validity of tender	:	120 days from opening of tender
10	Period for honouring interim bill	:	Payment of bill certified by the Architect shall be paid within 60 days or as per company rules & regulations
11	Validity of rates after award of work	:	The rates shall be firm for period of 4 Months from the date of award of work or till final completion of work whichever is later. "No escalation in prices will be allowed"

13. Upon it becoming reasonably apparent that the work is delayed, the contractor shall forthwith give written notice of the cause of the delay to the client and the Architect. Then the client and the Architect shall as soon as they are able to estimate the length of the delay beyond the date or time aforesaid, make in writing a fair and reasonable extension of time for completion of the work, provided always that the contractor shall use constantly his best endeavour to prevent

delay and shall do all that may reasonably be required to the satisfaction of the client and the Architect to proceed with work.

14. **Damage for non-completion:** If the contractor fails to complete the works by the date specified in the conditions or within any extended time fixed, the contractor shall pay to NIA a sum calculated at the rate stated in the special conditions as agreed liquidated damages for the period during which the said work shall so remain or have remained incomplete. The client may deduct such damages from any money that is otherwise payable to the contractor, under this contract.
15. **Extra Items:** All authorised extra items where rates cannot be derived from tender the contractor shall submit rates, supported by rate analysis worked on the 'actual cost basis' plus 15% towards establishment charges, contractor's overhead and profit & GST etc
16. **Deviation in Quantities:** There is no variation limit in tender quantity for any variation in plus or minus, contractor is supposed to execute the same at quoted rates.
17. **Photographs:** The rate quoted shall include the cost of supplying colour photographs of 8" x 10" size including soft copy to employer after completion of work from various angle one set each to Employer and the architect separately in respect of each floor/dept as directed.

## GENERAL SPECIFICATION

The specification are for the work to be executed items to be supplied and materials to be used in the works as shown and detailed on the drawings and **as per BOQ** in all under the supervision and to the satisfaction of the Architect /Employer.

The workmanship is to be the best available and of a high standard. Use must be made of specialist tradesmen in all aspects of the works, and allowance must be made in the rates for doing so.

The materials and items to be provided by the contractor shall be the best of their respective kinds, approved by the architect in accordance with any samples which may be submitted for approval and generally in accordance with the specifications. Where materials or products are specified in this specification and or / bill of quantities by the name of the manufacture or the brand trade name or catalogue reference the contractor will be required to obtained the approval of the architect / employer before using a material or product other than the specified. The contractor shall produce all invoices, vouchers or receipted accounts for any materials if called upon to do so by the Architect.

**Sample of all material** are to be submitted to the architect for his approval **within 10 days of issue of work order** before the contractor orders or delivers in bulk to the site. Also, the contractor will be required to submit specimen finishers of colors, fabrics etc, for the approval of the architect before proceeding with the works. Should it be necessary to prepare shop drawings, then four copies of such drawings shall be submitted for the approval of the architect who will retain ONE copies all at the contractors expenses.

# TECHNICAL SPECIFICATIONS

## FURNISHING WORK

### 1.0 SCOPE :

The technical specifications for the interior work under scope of this contract shall be in accordance with CPWD specification in vogue. If not covered therein with relevant (with latest amendments) and shall be read in conjunction with other documents forming the contract: viz., form of Tender Notice, Article of Agreement, General Bill of Quantities and Drawings.

### 2.0 GENERAL:

#### 2.1: WORK TO BE PROVIDED FOR :

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

- 1) Furnish all labor, materials, supervision, services, supports, scaffolds, approaches, Construction equipment, tools, plants etc. as required for proper execution of the job as per drawings and specifications.
- 2) Provide all incidental items not shown or specified in particular, but reasonable or necessary for successful completion of the work in accordance with the drawings, specifications and bill of quantities.
- 3) To extend facilities to the Engineer-in-charge to inspect work and assist them in obtaining samples, if they so desire.
- 4) To make good at his own cost and to the satisfaction of the Owner, all defects, arising in the opinion of the Architect/Owner from work or materials, not in accordance with the specification or the instructions of the Architect/Owner, which may appear within twelve months after completion of the work.
- 5) To execute the work according to the drawings or revisions thereof of schedule of Quantities/specifications / instructions issued by the Architect/Owner and no works should be done without proper drawings/specifications, written instructions given by the Owner/Architects.
- 6) Furnish samples of all materials including any tests thereon as directed by the Engineer-in-charge of the Owner/Architects.

#### 2.2 COORDINATION :

The Contractor shall be responsible for proper coordination with sub-contractors or other contractors employed by the Owner. The completed work after fitting of all fixtures (Even of other Contractors) if necessary, shall be at the custody of the contractor who will be responsible for handing over to the Owner.

### **2.3 APPROVED MANUFACTURER:**

Whenever materials or workmanship as per Manufacturer's specification has been specified, it will be the responsibility of the Contractor to submit authenticated documents from the Manufacturer for obtaining the approval of the Engineer-in-charge.

### **2.4 VARIATION :**

The work described in schedule shall prevail if it is at variance with the work described in specification.

### **3.0 GENERAL NOTES AND ADDITIONAL SPECIFICATIONS:**

- 1) All the rates quoted will be including all necessary lead and lifts.
- 2) All exposed faces of wooden members are inclusive of polishing of approved finish.
- 3) All partitions, doors, cupboards, wardrobes are inclusive of necessary ironmongery as specified or as instructed at site and after approval of samples.
- 4) Lipping for the edges of the block board with respective veneering or otherwise as directed.
- 5) All the furniture are subject to minor changes and improvement as per site instructions.
- 6) Quotations should include all the concealed locks, knobs, hinges of standard approved quality. Aluminum runners, sliding bearing etc., wherever required will not be paid separately unless otherwise stated.
- 7) All the doors, book cases, cupboards should be provided with locking arrangements.
- 8) Samples of all fittings and fixtures shall be got approved before use.
- 9) All plywood-veneered surface should be matching type throughout and to the fullest satisfaction of the Owner/Architect.
- 10) All plywood, Block board, Particleboard, Pre-laminated board shall be of approved manufacturers and shall be strictly BWP / BWR type bonded with phenol formaldehyde

synthetic resin as specified by Architect/Consultant.

11) All furniture pieces should be stable with necessary horizontal and vertical supports and is subject to continuous improvement. No extra charges will be paid for any changes until the sample is approved finally.

12) In case of teak wood planks, battens or frame members exposed surfaces should match with general color of teak wood veneered surfaces. All timber surfaces unless otherwise specified in the Schedule of quantities are to be finished in natural colour with N.C.Lacquire in matt finish.

#### **4.0 TIMBER :**

Timber shall be of good quality and well seasoned. It shall have uniform colour, reasonably straight grains, and shall be free from dead knots, cracks, shakes and sapwood. The moisture content shall be within the limits prescribed in maximum moisture contents.

**4.1 TEAK WOOD** (*Tectonagrandis*), Salwood (*Sohrearobusta*), Pia-sal (*Pterospernum muresuplum*) shall be of outstanding merit in retention of shape and durability.

First Class teak wood such as Balارشا, malabar and dandeli: Individual hard and sound knot shall not be more than 123mm in diameter and the aggregate area of all the knots shall not exceed one-half percent of the area of the piece. It shall be close grained.

**4.2 BADAM/CHAMP/KASI (BIJA) WOOD** (*Bridalia Retgusa*)

First Class:

No individual hard and sound knot shall be more than 25mm in diameter and the aggregate area of the live knots shall not exceed one percent of the area of the piece, should be properly treated with wood preservative and kiln seasoned and shall be used under head "Secondary Hard Wood"

#### **5.0 PLY WOOD.**

The veneers for all grades shall be either rotary cut or sliced. The veneers shall be sufficiently smooth to permit even spread of glue. The thickness of all veneers shall be uniform, within a

tolerance of (+) (-) 5% corresponding veneers on either side of the center one shall be of the same thickness and species. The requirement of thickness of face and core veneers shall be as follows:

a) In 3-ply boards upto 5mm thick, the combined thickness of the face veneers shall not exceed twice the thickness of center one.

b) In a multiply boards, the thickness of any veneer shall not be more than thrice the thickness of any other veneer.

c) The sum of the thickness of the veneer in one direction shall approximate to the sum of the thickness of the veneers at right angles to them and shall not be greater than 1.5 times this sum except for three ply as specified in (a)

The thickness of plywood boards shall be specified as stated in schedule of works.

d) Plywood shall be as specified quality with decorative surface veneer. Unless specifically permitted otherwise, the adhesive used in plywood shall be PHENOL - FORMALDEHYDE resin of B.W.P. grade conforming to IS; 848.

#### **6.0 LAMINATED PLASTIC SHEETS:**

All laminated plastic sheets shall be unless specified and shall be specified make or approved equivalent. The colour, pattern, finish and texture shall be as approved by the Architect/Owner. All laminate shall be of 1 mm. thk. & conforming to I.S. : 2046

#### **7.0 BWR PLY.**

BWR plywood shall be as per I.S. : 303.

#### **8.0 FLUSH DOORS :**

Flush doors shall be of solid core with commercial or decorative faces and hard wood edges. The core for solid core doors shall be of block board or wood particleboard. The Contractor shall give a guarantee that the adhesive used is Phenol -Formaldehyde of B.W.P. grade, conforming to I.S.: 848. The thickness shall be as specified in the "Schedule of Items"& conforming to I.S. : 2202(1).

#### **MOISTURE CONTENT**

## **MAXIMUM MOISTURE CONTENT FOR WOOD WORK.**

Thinner than 50 mm 10% Average moisture content.

Thicker than 50mm 12% Average moisture content.

## **9.0 WORKMANSHIP OF WOOD WORK**

### **9.1 GENERAL :**

The work shall be done by skilled carpenters as per details shown on drawing or instructed by the Architect.

Framing timber and other work shall be close fitting with proper wood joinery accurately set to required lines or levels and rigidly secured in place. Special care shall be taken to match the grain of timber or plywood, which shall be subsequently polished. Screws or nails will not be permitted to the edge of plywood or chipboard sheets. All exposed plywood edges shall be finished with teak wood liping unless otherwise shown on drawings.

### **9.2 FINISH :**

All carpentry work after finishing shall be sand papered smooth. A primer coat shall be given after inspection by the Architect to all surfaces other than those which shall be subsequently polished or covered with laminated plastic sheets.

### **9.3 SURFACE TREATMENT :**

When shown on drawing or called for in schedule, decorative or laminated sheets shall be bounded under pressure to the surface to be finished. The adhesive used shall be of approved brand and brought to site in sealed container. The rate of application and the length of time for which the pressure is to be applied shall be as per the Manufacturer's instructions. The edges of sheets shall be protected by teak lipping or beveled as shown on drawings.

## **10.0. PAINTING WORKS.**

### **10.1 PRIMING COAT OF WOOD, IRON OR PLASTERED SURFACE;**

**Preparation of surface.**

#### **i) Wood Surface:**

1) The wood work to be painted shall be dry and free from moisture.



2) The surface shall be thoroughly cleaned. All unevenness shall be rubbed down smooth with sand paper and shall be well ducted. Knots if any, shall be covered with preparation of red lead made by grinding red lead in water and mixing with strong glue sized and used hot. Appropriate filler materials with same shade as paint shall be used where specified.

3) The surface treated for knotting shall be dry before painting is applied. After the priming coat is applied, the holes and indentations on the surface shall be stopped with glazier putty or wood putty. The primer shall be prepared on site or shall be of approved brand and manufacturer as specified in the item. Paint shall be anti-corrosive Bit mastic paint, Aluminum paint or other types of paint as specified in the description of the item stopping shall not be done before the priming coat is applied as the wood will absorb the oil in the stopping and the latter is therefore liable to crack.

#### **ii) Iron and steel surface.**

1) All rust and scales shall be removed by scrapping or by brushing or by brushing with steel wire brushes. Hard skin or oxide formed on the surface of wrought iron during rolling which become loose by rusting, shall be removed.

2) All dust and dirt shall be thoroughly wiped away from the surface. If the surface is wet, it shall be dried before priming coat is undertaken.

#### **10.2 Application:**

The primer shall be applied with brushes, worked well into the surface and spread even and smooth. The painting shall be done by crossing and laying off as described in cement paint above.

#### **11.0- PAINTING WITH READY MIXED PAINT/SYNTHETIC ENAMEL PAINT :**

##### **11.1 Preparation of Surface:**

##### **i) Wood Work**

The surface shall be cleaned and all unevenness removed as specified in wooden surface, knots if visible, shall be covered with a preparation of red lead. Holes and indentations on THE surface shall be filled in with glazier putty or wood putty and rubbed smooth before painting is done. The surface should be thoroughly dry before painting.

##### **ii) Iron and Steel Work:**

The priming coat shall have dried up completely before painting is started. Rust and scaling shall be carefully removed by scrapping or by brushing with steel wire brushes. All dust and dirt shall be carefully and thoroughly wiped away.

#### **11.2. Application:**

The specification described in cement paint shall hold good as far as applicable. The number of coats to be applied will be as stipulated in the item. The painted surface shall present a uniform appearance and glossy/mat finish as described in schedule of Quantities free from streaks, blisters etc.

#### **11.3. Painting on old surface:**

The surface, which has been painted earlier, shall be considered to be old surface.

#### **11.4. Preparation of surface:**

##### **i) Wood work:**

If the old paint is sound and firm and its removal is considered unnecessary the surface shall be rubbed down with pumice stone after it has been cleaned of all smoke and grease by washing with lime and finishing with water and drying. All dust and loose paint shall be completely removed. The surface shall then be washed with soap and water. If the old painted surface is blistered or flaccid badly, old paint shall be completely removed with the applications of a paint remover following the specification of the Manufacture. The paint remover shall be of a brand and manufacture approved by the Architects/Consultant. It shall be free from alkaline matter and non-caustic so that it can be handled by workmen without injury. It shall be of non-flammable quality as far as possible and such removal shall be paid for separately. Holes and cracks if any shall be stopped with glazier putty or wood putty. Further the painting itself shall be treated as on new surface and paid for, accordingly.

##### **ii) Iron and Steel work:**

If the old paint is sound and firm and its removal is considered unnecessary, it shall be rubbed with wire brushes and any loosened paint taken off. All dust shall be thoroughly wiped away.

This surface shall then be wiped finally with mineral turpentine to remove grease and perspiration of hand marks etc. and then allowed to dry.

If the old painted surface is in bad condition and blistered and flaked, the old paint shall be completely removed and the surface prepared as described in above. Such removal shall be paid for separately. The painting including the priming coat shall be treated as one new work and paid for accordingly.

## **12. FRENCH SPIRIT POLISHING:**

Pure shellac varying from pale orange to lemon yellow color, free from resin or dirt shall be dissolved in mentholated spirit at the rate of 140gm. of shellac to 1 litter of spirit. Suitable pigment shall be added to get the required shade.

### **12.1 Polishing new surface :**

Preparation of surface - The surface shall be cleaned. All unevenness shall be rubbed down smooth with sand paper and well dusted. Knots if visible shall be covered with a preparation of red lead and glue sized and used hot holes and indentations on the surface shall be slopped with glazier putty. The surface shall be then be given a coat of wood filler made by mint whiting(Ground chalk in ethylated spirit at the rate of 1.5 kg of whiting per litter of spirit.) The surface shall again be rubbed down perfectly smooth with glass paper and wiped clean.

### **12.2 Application :**

The number of coats of polish to be applied shall be as decided by the Architect to get the desired finish. A pad of woolen cloth covered by fine cloth shall be used to apply the polish. The pad shall be moisture with the polish and rubbed hard on the wood, in a series of over lapping circles applying the moisture sparingly but uniformly over the entire area to give an even level surface. A trace of linseed oil on the face of the pad facilitates this operation. The surface shall be allowed to dry and the remaining coats applied in the same way. To finish off, the pad shall be covered with a fresh piece of clean fine cotton cloth slightly damped with mentholated spirit and rubbed lightly and quickly with circular motions. The finished surface shall have a uniform textures.

## **ELECTRICAL WORK**

### **GENERAL SPECIFICATION**

- 1.All installations shall comply with the requirements of the Finding Electricity Rules, 1956, as amended from time to time and as per relevant clauses of National Electrical Code,1983.
- 2.All materials to be arranged by the Contractor for use in the work must be got approved from the Architect/Consultants well in advance before these are actualized on the work.
3. Bad workmanship is liable to be rejected.
4. The contractor/his supervisor will be bound to sign the site order book and to carry out the instructions given therein.
- 5.All repairs and patch work shall be neatly carried out to match with the original finish and

to the entire satisfaction of the Owner/Architect. Any damage to the building due to execution of work shall have to be made good immediately by the contractor at his own cost.

6. The Contractor shall make his own arrangements for storing the materials and watch and ward at his own cost, even for the installation till the date of completion and handing over the site.

7. The Contractor shall make his own arrangement at his own cost for all general and electrical tools and plants required for the work.

8. All debris due to the electrical works shall be removed and site shall be cleared by the Contractor as soon as the work is completed.

9. Wiring conduit routes shall be marked at site first and got approved from the Architect/Consultant before the commencement of the actual work.

10. The work shall ordinarily be carried out according to the drawings supplied with the schedule of work at the time of award of work, subject to any change made by the Architect/Consultant.

11. All the materials to be used are not covered by any one of the above specifications, it should be got approved from the Architect as in conditions No.2 above.

12. Unless otherwise mentioned in the schedule of work, the contractor shall use the materials in the work according to the **LIST OF RECOMMENDED MANUFACTURERS** enclosed with the **BOQ**.

13. In case the particular make of materials mentioned under conditions 11 & 12 above are not available at the time of execution of the work, the alternative make of materials has to be approved from the Architect/Consultant before its use.

14. Thimbles are to be provided wherever required without any extra charges of cables terminations of size 16 sq.mm. above.

15. The adopter boxes are to be made up not less than 16 SWG thick M.S. sheet.

16. Where unless specified, the G.I. boxes should be 600mm deep (Inside)

17. The brass batten holder/angle holders should be of as per IS specifications and ISI approved.

18. The work shall comprise of entire labor including supervision and all materials necessary to make a complete installation and such test as commissioning may be required to give a satisfactory working installation to the satisfaction of the company.

19. The tenderer shall visit the site before quoting the rates and shall submit the tender complete in all details whether such details have been mentioned in the schedule of work or in

specifications.

20. The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause for such delays may be.

21. No import license is required for any equipment.

22. All necessary safety features required as per various statutory authorities for the entire installation of work shall be taken into consideration by the Contractor and work to be carried out accordingly.

## **TECHNICAL SPECIFICATIONS**

### **TECHNICAL SPECIFICATIONS FOR CONCEALED CONDUIT LAYING**

#### 1. Type and size of Conduit:

All conduit pipe shall be screwed type, solid drawn or welded and with black stove enameled surface or galvanised and of thickness conforming to IS :9537 Part II of 1981 (or latest revision) in all respects. The conduits are to be free from burrs and internal roughness. No conduits less than 20mm in dia shall be used, unless specified.

#### 2. Accessories :

Only screwed type of accessories are to be used.

#### 3. Conduit Joints :

The conduit shall be properly earthed. In long distance straight runs of conduit at reasonable intervals on running threads with couplers and jam nuts. Threads on conduit pipes in all cases shall be between 13mm to 27mm long sufficient to accommodate pipes to full threaded portion of couplers or accessories. Cut end of conduit pipes shall have no sharp edges or any burrs left to avoid damage to insulation of conductor while pulling them through such pipes.

#### 4. Protection against dampness and rust :

In order to minimize condensation and sweating inside the tube, all outlets of pipes system shall be properly drained and ventilated, but in such a manner as to prevent entry to insects inside the conduit. To protect against rust the outer surface of the conduit and accessories shall be painted and the bare thread portion is to be pointed with anti-corrosive preservative.

5. Bends in Conduits :

All necessary bends in the system including diversion shall be done by bending the pipes, or by inserting suitable inspection type bends, elbows or similar fittings, or by fixing cast iron inspection boxes whichever is most suitable.

6. Maximum capacity of conduits for drawing in of PVC insulated cables shall be as

follows :

<i>600/1100V PVC copper wire</i>	<i>in 20mm dia conduit</i>	<i>in 25mm dia conduit</i>
-----	-----	-----
1.5 Sq.mm	4 Nos.	10 Nos.
2.5 Sq.mm	4 Nos.	10 Nos.
4.0 Sq.mm	3 Nos.	8 Nos.
6.0 Sq.mm	2 Nos.	6 Nos.
10 Sq.mm	--	4 Nos.
16 Sq.mm	--	2 Nos.

7. Fish Wire :

18 S.W.G. G.I. wire shall be used and it shall protrude the conduit ends by 9 inches.

8. Conduit laying in floor/roof slabs before casting :

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

While laying the conduits for concealed wiring in the ceiling or in the beams and columns and before casting, the contractor shall ensure that both ends of the conduit are plugged by means of deadened socket or otherwise so that any foreign matter can not enter the conduit and choke them.

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

Each PVC/Polythene conduit shall be provided with protruding length of not less than 9 inches

on free end of the conduits.

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

All ceiling outlets shall be terminated in a round C.I./G.I. circular box/deep box to suit standard size ceiling rose or/and rectangular C.I./M.S. junction box or fan hook box as the case may be.

It will be mandatory for the contractor to get the layouts approved by the NIA's Engineer/Architect when the conduits are laid and bound to steel reinforcement rods, before he can release the work for casting of floor/roof.

#### 9. Connector Boxes, Draw-in-Boxes, Junction Boxes :

These shall be manufactured from 16 SWG M.S. sheet and have M.S. cover. Minimum size for connector boxes is 6" X 4" and for Draw-in-Boxes 4" X 4".

#### 10. Fan Hook Boxes :

These shall be 125mm X 125mm X 75mm deep, constructed from 16 SWG M.S. sheet, and provided with one 12mm dia M.S. rod 300mm long.

## **TECHNICAL SPECIFICATION FOR ELECTRICAL WIRING**

### **1. GENERAL REQUIREMENTS**

The installation shall generally be carried out in conforming with the requirements of the Indian Electricity Act, 1910 as amended up to date and the Indian Electricity Rules, 1956 framed Thereunder, the relevant regulations of the Electric Supply Authority concerned, and also with the specifications laid down in the Indian Standard I.S. 732 - 1963 Code of Practice (revised) for Electrical Wiring Installations (system voltage not exceeding 650 volts) and I.S. 2309 - 1969 Code of Practice for the protection of Buildings and Allied Structure against Lightning and IS 3043 - Indian code of Practice for Earthing. The wiring shall also be according to the specifications of P.W.D. of the Local Government.

### **2. MATERIALS**

All materials, fittings, appliances, used in electrical installations, shall conform to Indian

Standard Specifications wherever these exist. A list of approved materials is attached after words. Materials not included in the list shall be got approved by the Architects/Owner prior to actual use.

### **3. MAIN SWITCH GEAR**

Iron clad switch fuse and isolator units should conform to B.S. 861 (I.S. 2510-1954). The quick made and break mechanism shall be self interlocked with the cover. In "Off" position there must be two breaks per pole.

Main switch gear shall be properly earthed with two numbers conductors if M.V. and one number of L.V.

### **4. BUSBAR CHAMBER ( B.B.C.)**

This shall be totally enclosed, metal clad type fabricated from rust proofed 16 SWG sheet steel on angle iron frame and provided with sheet steel or cast iron cover and undrilled detachable end plates, suitable for mounting on wall or angle iron floor stand and painted with high quality enamel paint. G.I. bolts and nuts shall be used for assembly with suitable packing materials to ensure dust proof finish. Meters shall be provided on suitable sheet steel boxes. Switch shall be provided with cable and boxes as required.

The depth of B.B.C. shall be 150mm (minimum). Minimum clearance of phase bars to earth shall be 25mm and between bus bars shall be minimum 32mm.

H.C. (High conductivity) copper busbars properly tinned are to be rated at 1000 Amps. per Sq. in and Aluminium bus bars (wrought aluminium alloy strip) conforming to relevant I.S. specification at 800 Amps per sq. in.

Neutral Busbars are to be rated to carry 60% of phase current. These shall be carried on glazed porcelain supports of proper dielectric and mechanical strength and shall be appropriately colour coded for identification of Phase.

Lettering shall be done for identification of switches as directed. The contractor shall submit fully dimensioned drawing of the board with the physical position of the switches and other components to the Architects for their approval before the same is fabricated.

There shall be two numbers of Earth Terminals. Suitable Danger Board shall be provided.

### **5. INTERCONNECTION B.B.C. & SWITCH FUSE, METERS**

For ratings above 150 Amps these shall consist of insulated copper strips to adequate section.



For rating below 150 Amps PVC copper cable tails of appropriate size, terminating in tinned copper sockets may be used. The above are to be enclosed either in sheet metal trunking or conduits so that no part is exposed.

## **6. DISTRIBUTION BOARDS**

These totally enclosed metal clad type Distribution Boards with hinged lids shall be in accordance with I.S. 2147-1952 and 2675-1966 and B.S. 214 and shall be welded construction and fabricated from rust proofed sheet steel and finished with anticorrosive stove enamel paint and have provision for fixing on wall and have earthing terminals.

Power Distribution Boards (400 volts TPN) shall be constructed from 16 SWG sheet steel and Branch Distribution Boards (230 volts SPN from 18 SWG sheet steel).

The minimum ratings of phase and neutral busbars shall be 67% of the total rating of fuse ways.

Above 32 Amps Neutral Busbars may be half the size of the Phase Bus bars.

The fuses shall be mounted on glazed porcelain supports of proper dielectric and mechanical strength. TPN units should have phase separation barriers between fuse banks.

Cables shall be connected to a terminal by crimped lugs.

Where two or more B.D.B's feeding low voltage circuits are fed from different phases of a medium voltage supply, these B.D.B's shall be installed at least two meters apart.

All three phase power distribution boards shall be properly earthed with two number 10 S.W.G. galvanised iron wires and provided with suitable Danger Boards. All SPN B.D.B.'s shall be properly earthed with one number 10 SWG galvanized iron wire each.

## **7. CABLES AND CONDUCTORS**

All cables shall conform to relevant Indian Standard. Conductors of all cables except for flexible cables, shall be of aluminum, unless specified otherwise.

## **8. TESTING OF INSTALLATION**

Before a completed installation or an addition to an existing installation is put into service, the following tests shall be carried out by the contractor in presence of the Engineer in charge.

### **a) Polarity of Switches**

It must be ensured by test that all single pole switches have been fitted on the live side of the circuits they control.

**b) Insulation test :**

i) By applying a 500 volt mugger between earth and the whole system of conductors or any section there of, with all fuses in place and all switches closed, all lamps in position or both poles of installation otherwise electrically connected together : The result in meghom shall not be less than 50 divided by the number of points on the circuit, and should not be less than 1 meghom.

ii) Between all conductors connected to one phase and all such conductors connected to the neutral or to the other phase conductors of the supply after removing all metallic connections between the two poles of the installation and switching on all switches. The insulation resistance shall be as in (i) above.

**c) Earth continuity Test**

The earth continuity conductor including metal conduits, and metal sheaths of cables in all cases shall be tested for electrical continuity. Electrical resistance of the above along with the earthing leas cut excluding any resistance of earth leakage circuit breaker, measured from the connection with the earth electrode to any point in the earth continuity conductor in the completed installation shall not exceed one ohm.

**d) Earth Resistance Test**

To ensure effectiveness of installation earth, the value of earth resistance shall within 5 ohm for installation capacity upto 5 KW and one ohm for installation of higher capacity.

9. The completed work will be taken over only if the results obtained in above tests are within the limits mentioned above and in accordance with I.E. Rules.

On completion of the installation work, a certificate shall be furnished by the contractor, countersigned by the certified supervisor under whose direct supervision the installation was carried out. This certificate shall be in a prescribed form as required by the local Electric Supply Authority.

**10. SPECIAL SPECIFICATIONS**

- a) Before fixing all switches, fittings etc. should be produced before Engineer in Charge and get approved.
- b) All metal switch boards and switch/regulator boxes to be used in work shall be painted with two coats of anti rust primer (red oxide paint) prior to erection. After erection they shall be again painted with two coats of enamel paint of approved quality.
- c) Before execution of any portion of conduit work for wiring neat proper layout should be made out by the contractor and got approved from the Engineer in charge. For this purpose contractor is advised to get acquainted with the layout drawings of the Consultant/Architect.
- d) While laying the conduits for concealed wiring in the ceiling or in the beams and columns and before casting the contractor must ensure that all the inlets and both ends of the conduits are plugged by means of dead end socket so that no foreign matter can enter the conduits and choke them.
- e) Damage to any fitting during erection and before handing over the installation by contractor shall be set right or replaced by the contractor at his own cost.
- f) Caution Board of proper size wherever required, shall be provided, as per I.E.E. regulations for which no extra payment will be admissible.
- g) Any repairs done to wall etc. should match with the surrounding surface otherwise same will be got done through Building Contractor at the cost of the Electrical Contractor.
- h) Earthing Installation shall be done in the presence of Engineer in charge or his representative.
- i) The installation should not be energized without adequate earthing.
- j) The I.C. switches and Distribution Fuse Boards shall be provided with neat lettering in block letters with paint for identification of the I.C. switches and for the points connected to each fuse way of the D.B's for which no extra payment will be admissible.

k) Completion Drawings

The Contractor shall be required to submit along with Final bill, the under noted controlled by them).drawings on tracing papers, along with three copies of Ammonia print each.

1. Plan (as per structural drawing) of each floor (not less than 1:100 metric scale) showing :

- i) Locations of Main Switch Board, Distribution boards (with the circuit numbers controlled by them).

- ii) The runs of mains and sub mains.
- iii) Location of lights, fans, wall sockets, other power consuming devices together with type of fittings and fixtures including circuit numbers.
- iv) Position of lightning conductors and route of running conductor.
- v) Position of Earthing Stations for light and power and Lightning Conductor installation.

and giving the following information on the plans :-

- a) Name of work with job no. Accepted Tender No.
- b) Date of completion.
- c) Name of the Place.
- d) Name and Signature of the Contractor.
- e) Scale of Drawings.

2. Schematic lines layout diagram of each floor showing (i) Layout and connections of Main and Sub-board, B.D.B. having descriptions of the size, capacity, type and their numbers, the system and the source of supply, (ii) Location, Size, Type, length of main and sub main cables (iii) Loading of each B.D.B. indication of phases, Departmental mark in each B.D.B. and switchgear. The drawings shall be very neatly drawn and submitted properly without folding them.

3. Cable route should be marked on site plan with measurements from permanent structures.

## **TECHNICAL SPECIFICATION FOR CABLE INSTALATIONS**

### **1. General**

All HV Cables (upto 33 KV earthed system) shall be either paper insulated SL type or XLPE Insulated aluminium conductor cable conforming to I.S. 692 and I.S. 7098 respectively.

All Medium Voltage and Low Voltage PVC insulated and armoured/ unarmoured cables shall conform to IS 1554 Part-I-1964 and of 1,100 volt grade.

Old and used cables must not be used for installation. Only one make of cable shall be used. All cables brought to site must be tested and got approved by the Engineer-in-charge before these can be laid. The cables shall be dispatched to site on wooden drums with ends sealed. Exact lengths shall be determined by the Contractor after measurement at site.

The underground installation of cables shall be generally conforming to I.S. 1255-1967, Code of practice for installation and maintenance of under ground cables (upto including 33 KV).

## **2. Laying of Cables**

a) Direct in Ground Trenches shall be 750mm deep (minimum) for LT Cables and 1.2 M (4'-0') deep minimum for HT Cables from ground level and trenching work shall including all pumping and bailing out water. These trenches shall be wide enough to accommodate all the cables with brick separations as per the requirements specified in the relevant I.S. When more than one multicore cable is to be laid in the same trench, a minimum horizontal Inter-axial spacing between cables will be as per relevant I.S. After excavation of the trench of proper size, the bottom of the trench shall be dressed and leveled and filled with a 75mm layer of fine sand. The cable shall then be laid with bricks on both sides of the cable continuously. After having the space within the bricks, filled and packed upto a level of 75mm (3") above top of cable with fine sand, the top layer of bricks shall be

placed side by side in continuous series as protective cover. Total No. of bricks required being 16 per metre run. The remainder of the trench shall be filled with riddled soil, well rammed and watered to a level of 75mm (3") above surrounding ground level. The ground level surface of the whole trench route shall be restored properly after completion of cable laying.

b) Inside Building Cables shall be laid on walls/ceilings/structure, unless specified otherwise, with M.S. bracket sand suitable clamps or over claw type aluminium cleats fixed on M.S. brackets, paced not more than 450mm apart. G.I. Bolts of suitable sizes are to be grouted on the wall properly for fixing the brackets.

c) Minimum bending radius permissible is 12D for MV Cables and 20D for HV cables. At joints and terminations, the individuals core of multicore cables should never be bent so that the radius is less than 15 times the diameters over the insulation. No Cable jointing is allowed between two terminals points.

## **3. Cable Jointing**

All cable joints shall be carried out by experienced and Licensed jointers under strict supervision.

Electro plated brass cable glands, aluminium / tinned copper cable sockets and approved jointing materials must be used. The price for cable jointing and finishing the ends of the cable shall include all materials and shall also provide for tools and plants for the work. The cable accessories and other associated materials shall conform to Indian Standard Specification where applicable. Proper earthing of cable glands and armoured shall be included in the job.

## **4. Testing of Cables**

All cables shall be tested for insulation resistance with megger - 5,000V constant pressure megger insulation tester for HT Cables and 1,000 V constant pressure megger for MV cables, before installation.

After installation and end termination, the cables shall be again subjected to the above test.

Insulation value for HT Cables shall not be less than 100 me ohms and for MV Cables 1.0 megohm.

After laying and jointing, the HV Cables shall be subjected to high voltage pressure test before commissioning the test voltage being as specified in I.S. 1255-1967 or latest.

### **5. Testing of Installation**

Before the completed installation is put into service or handed over to Owner, the installation is to be subjected to the above tests to the satisfaction of the Engineer-in-charge. The completed work will be taken over only if the results are acceptable to the Architects/Owner.

## **TECHNICAL SPECIFICATION FOR AC INSTALLATIONS**

### **GENERAL**

- a. Air Conditioner, which is offered by the tenderer, shall carry a five star rating (BEE-2018) with inverter & only of a reputed Brand.
- b. The product on offer shall carry a minimum ON SITE warranty period of one year.
- c. The compressor of the air conditioners should carry a minimum warranty of five year.
- d. Product on offer shall carry a free replacement guarantee period of a minimum 30 days in case the supplied product is found to be carrying a manufacturing defect or is a malfunctioning unit.
- e. There should be an authorized service center of the offer product in Kolkata, WB.

### **Supply Part (High Side) :**

1. Supply will be as stated in the description of BOQ.
2. Supplied AC's shall have **Copper** Evaporator & Condenser coils.
3. Evaporator & Condenser coils fins should have formal portative coating (blue coating)
4. Supply of Suitable powder coated MS /GI stands for outdoor unit fixing along with hardware like cadmium coated/GI/SS is in vendor scope.

5. Miscellaneous items required for installation of AC units including but not limited to copper pipes of required sizes for inlet & Out let lines, Redo flex insulation for inlet & outlet line required additional extra length more than standard length to be provided wherever required (approx. 10% of total quantity supplied, Gauge, Cable ties, UV Proof plastic ribbon, 4CX 2.5 sq mm copper cable(FR/FLRS),
6. Installation of suitable length drain pipe is in vendor scope of supply.
7. One year warranty shall be given to the AC's supplied along with three free servicing.
8. 5 Years warranty for split AC compressors shall be given.
9. Air –conditioner should have **ECO** friendly Refrigerant gas **R410A**.

#### **Installation Part (Low Side) :**

1. Time period for installation & Commissioning of AC's will be six month from material supplied.
2. Installation & Commissioning of AC's in-door unit with standard vacuum machine.
3. Hard-ware required for fixing of stands in-door and out-door unit.
4. Commissioning report duly signed by Vendors representative & MRPL TIC.
5. Warranty period three free service & in case of any brake down necessary repair works / rectification to be done with-in 15 days period.
6. Necessary documentation for arranging gate pass.
7. Delivery to be staggered in lot of 50 no's (4\*50), based on instruction of EIC.

#### **TECHNICAL SPECIFICATION FOR EARTHING INSTALLATION**

The installation shall generally conform to IS 3043 - Indian Standard Code of Practice for Earthing, as amended upto date.

##### **1. Earthing Electrode**

The earthing electrode shall be galvanized steel pipe of Class B medium quality – 40mm dia bore and 3.04 M (10') long. A hole shall be provided at 100mm (4") from the top end to receive a 13mm (1/2") dia galvanized bolt and the bottom end shall be chisel cut for easy penetration into soil.

A suitable trench shall be excavated about 0.45 M (1'-6") deep and the pipe electrode driven to an average depth of 3.35 M (11'-0") below ground level. The top end of the electrode shall be at an average depth of 0.30 M (1') below the ground surface.

Alternate layers of Charcoal or Salt and Coke to be provided for Electrode as per I.S. Code of Practice unless specified otherwise.

One No. 6 SWG G.I. wire (unless otherwise specified) shall be connected securely on the properly cleaned surface at the top end of pipe electrode by means of a 100 mm (4") long X 13 mm (1/2") dia G.I. bolt nut and double washers. The earth lead conductor shall be protected mechanically by means of a continuous length of G.I. pipe (Class A) having 13mm (1/2") inside diameter upto a height of 0.60 M (2') above ground and the same shall be completely filled with bitumen compound and topped upto overflowing.

## **2. Masonry Inspection pit**

The inspection pit for the earth station shall be approx. 0.56 M X 0.56 M (1'-10" X 1'-10") outside dimensions and approx. 0.45 M (1'-6") deep when completed, having 5" thick cement brick work with 1st class bricks in cement mortar (6:1) both inside and outside plastered 19mm (3/4") thick and neatly cemented 1.60mm (1/16") thick, both inside, outside and top. The opening on top shall be provided with a C.I. ring with lockable cover fixed flush with ground surface.

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

## **3. Locations for Earth Electrodes**

Electrodes shall be buried at least 2 M (6'-6") away from the building pole or object to be earthed. However, earthing electrodes for L.C. installations should be as close to the down conductors as possible.

Electrodes when installed in parallel, shall not be placed less than 2 M (6'-6") apart and preferably placed at distances greater than twice their lengths.

## **4. Earth Busbar**

a) Galvanized M.S. Flat

The busbar shall be of suitable size and length, as specified in the Schedule of Items, heavily



galvanized and having adequate number of drilled and tapped holes 30mm apart, complete with G.I. bolts, nuts, washers for securely connecting the earth leads and earth continuity conductors. The busbar shall be fixed on wall, having clearance of 6mm from wall with spacing insulators with at least the numbers 13mm (1/2") G.I. rag bolts spaced about 0.46 M (1'-6") apart.

#### b) Copper Flats

To be used, as specified, in the Schedule of Items, where earthing requirements are more stringent. Brass bolts, nuts washers shall be used for connections.

### **5. Value of Earth Resistance**

In case of installations where the load does not exceed 5 K.W. the resistance to earth shall on no account exceed 5 K.W. the resistance shall not exceed 1 ohm.

For sub-station, the value is 1 ohm.

For L.C. installations, the value is 1 ohm.

## **TECHNICAL SPECIFICATIONS FOR L.C. INSTALLATION**

### **Specifications :**

The installation shall conform to I.S. : 2309-1989 as amended up to date.

#### **1. Conductor for L.C. System**

It shall be well galvanized No. 7/8 SWG G.I. stranded wire galvanizing conforming to B.S. 728/1961) unless specified otherwise. The conductor shall be well annealed and flexible. There shall be no joints in any conductor between terminal ends.

#### **2. Air Terminals**

Air Terminal shall be single prong type constructed of 15mm N.B. (Class-B) medium quality G.I. pipe 30 cm long with a screwed G.I. solid conical cap 100mm long (overall) on top and shall have a screwed galvanized M.S. flange 75mm dia X 6mm thick at bottom end and shall be grouted on the parapet, roof, etc. with rag bolts in cement mortar unless specified otherwise.

### **3. Conductors on Parapet**

The conductors shall be coursed along ridges, parapets, edges of the flat roof, over flat roof where necessary in such a way as to joint each air terminals to the rest. The conductors shall be fixed securely with proper saddles spaced not more than 2 ft. (0.6 M) apart.

### **4. Vertical Down Conductors**

The conductors, direct from test point shall be connected to parapet conductors or air terminals and shall be coursed through shortest possible routes without abrupt turns or kinks. While passing through cornices, these shall pass through G.I. pipe (Class-B) having adequate bore. These conductor shall be fixed securely with proper saddles spaced not more than 2' ft. (0.6 M) apart.

### **5. Protection Against Damage and corrosion**

No upturns are permitted and any bend necessary shall have a permissible radius. The end of G.I. pipe protections on wall shall be properly sealed with bitumen compound to prevent corrosion.

### **6. Metallic Objects near conductors**

The conductors shall be so laid as to maintain a separation distance exceeding 2 Meters (6'-6") between (a) any electric conductor running in parallel, (b) metallic objects, viz. iron girders, water tanks, iron stair case, water/gas pipes inside or by the side of the building.

All the external metallic objects viz. water tanks, gutters, rain water down pipes, water mains, etc. shall be bonded to the nearest conductor by means of a short tail.

### **7. Joints & Bonds**

All joints between conductors shall be made after cleaning and tinning the ends of conductors to be joined, binding them together for about 100mm (4") with No. 14 SWG G.I. wire and then welding. Joint between Air Terminals and conductors shall be made with proper lugs duly fixed to conductors and bolts, nuts washers etc. Bonding shall be as short as possible. All joints & Bends are to be mechanically and electrically sound.

## **8. Earth Stations :**

Similar to Installation earths as specified elsewhere. Minimum number of earth station is two.

## **9. Installation Tests :**

After completion of works the ohmic resistance of L.C. installation complete with air terminals (without earth connection) shall be measured from the highest point and this shall be a fraction of one ohm. The resistance to earth of individual earth stations shall be tested by earth testing megger and must not exceed 1.0 ohms. The above tests shall be made in the presence of the representative of the Engineer-in-charge/Architects and the results recorded. A certificate of the same to be submitted duly certified by an licensed electrical engineer.

## **10. Completion Drawings :**

This shall be submitted along with the final bill.

# **SCHEDULE OF QUANTITIES**

## **PREAMBLES**

1. The quoted rates shall include clearing site from all debris, shrubs, vegetation, bushes, trees before commencement of work even if not otherwise specified. Trees with a girth of above 450 mm measured 300mm above G.L. shall be cut with prior approval from the Owner/Consultant.
2. The quoted rates shall be deemed inclusive of costs of all labour, materials, tools, plants, equipment, scaffolding, curing cost, all lead & lifts, all taxes including duties, octroi even if these are not otherwise mentioned in items. Only GST will be paid extra.
3. Products with I.S.I. stamping, if available shall be used with prior approval of the Consultant/Employer. Consultant/ Employer reserves the right to select any particular brand between different I.S.I. stamped products of the same category.
4. The quoted rates shall include for keeping pockets, holes, chases, etc., in concrete/masonry for running of Conduit etc.

## NOTES TO SCHEDULE OF ITEMS

1. Tenderers shall include in their rates quoted charges for preliminary and general items required for the execution of work such as tools and plants, workman's shed, temporary offices, cleaning site, scaffolding upto required height etc. The description of each item shall unless otherwise stated be held to include conveyance, labour, and finishing to required shape and size, setting, fitting and fixing in position, straight cutting and waste, return of packing, overheads, profits and other unless otherwise stated, be held to include the consequent waste.

2. The rates quoted by the Contractor should cover for work at any height for all the items of work under this contract. List of all materials will not form a criterion for any extra payment, unless otherwise stated in the particular item. In the event of arithmetical error/errors being discovered in the Contractor's tender the rate mentioned in works in the tender copy marked 'Original' will only be taken as bonafide.

3. Contractor should note that the tender is strictly on item rate basis and their attention is drawn to the fact that their rates for each and every item should be correct, workable and self-supporting. If called upon by the Architect/Employer detailed analysis of any or all rates shall be bound to recognize Contractor's Analysis.

4. Contractor should note that their rates should be inclusive of all attendance on their subcontractors & also for making good any holes and chases left by the Sub-Contractor before the builder's work is completed.

5. The Contractor shall be responsible for procuring all required materials sufficiently in advance and see that the work is never hindered for want of materials or due to any other reason or restriction.

6. The Contractor shall have to carry out all connected work within the boundary of proposed work and inside the building if ordered to do so by the Architect/Employer at the rates quoted in the Schedule of Items.

7. The Contractor is to study architectural and electrical drawings before commencing any work. In case of discrepancy the Contractor must report to the Architect/Employer immediately and shall get the same rectified before proceeding on.

8. The rate quoted for installation work shall include the necessary requirements of Indian Electricity Act and Rules in force at the time of carrying out work.

9. All materials which shall be used in the work must be from the list of the approved materials as mentioned in the specifications. Samples of materials proposed to be used shall be submitted for approval and nothing shall be used which are not approved.

10. General spirit of the technical specification and method of measurement shall be as laid down in the latest edition of I.S. Code of Practice. Rates quoted for all items shall include for the cost of supplying labour and materials fixing and/or erection complete with all the appliances necessary for the proper execution and carrying out of the work to the truest sense of drawing and specification though this may not be mentioned in particular item of in the Schedule of Items.

**Annexure-1-(Technical Bid)**

THE NEW INDIA ASSURANCE CO. LTD

**Mandatory information required for Prequalification of the bid**

**Primary Details of the Bidder**

Name of the Bidder	
Address	
Email id	
Contact Details	
Year of Establishment:	
Status of the Firm	
: Proprietary / Partnership / Pvt. Ltd. /Pub. Ltd.	
Registration number and date with Registrar of Companies/Firms :	
PAN Card Number :	
GST Number :	
Name Of the banker	
Account Number	
IFSC Code	
Type of account	
MICR code as per Cheque Leaf	
MSME (yes/no) – If Yes, Give Details	
Bank Branch Name	

**Mandatory information required for Prequalification of the bid**

<b>Sin o.</b>	<b>Eligibility Criteria for the Bidder</b>	<b>Complied (Yes/No)</b>	<b>Documents Required(to be uploaded )</b>
1	The bidder should be on empanelment with banks/Financial Institutions/Insurance Companies/PSU		Valid Empanelment letter.
2	Current solvency certificate from your Banker only for not less than 50% of estimate value :		Banker Certificate only
3	Value of the total work done till date		Supporting document
3.1	At least particulars of minimum 1 successfully completed similar work during last seven years amounting to 80% of estimate value or more: Successful completion Certificate from clients is mandatory.		Successful completion Certificate from clients
	OR		
3.2	At list particulars of minimum 2 successfully completed similar works during last Seven years amounting to 50% of estimate cost or more: Successful completion Certificate from clients is mandatory.		Successful completion Certificate from clients
	OR		
3.3	At list particulars of minimum 3 successfully completed works during last Seven years amounting to 40% of estimate cost or more: Successful completion Certificate from clients is mandatory.		Successful completion Certificate from clients
4	For electrical work, valid license from State Government is must. Subletting is allowed for only Electrical, data cabling and Lighting Fixtures. Sub contractor's license can also be submitted for this purpose but final liability of work will be of main Contractor only.		Valid electrical license from State Government
5	Have you in past carried out any works for Financial Institutes/Nationalized Banks/ PSUs or its subsidiaries?		Successful completion Certificate from clients
6	Have you been ever disqualified or blacklisted or levied penalty by the Organization/Bank/PSUs in past for non-fulfilment of the contractual obligations. If yes, please provide details in brief.		Self-declaration on letter head of bidder

Bidders meeting the above mentioned criteria are eligible to submit their bids along with supporting documents. If the Bid is not accompanied by all the required documents supporting eligibility criteria, the same would be rejected.

**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.**

Note: Similar works means, the vendor should have completed comprehensive work consisting of Civil, Sanitary Plumbing & Electrical Repair & Rehabilitation work of Residential Quarters being the selection criteria.

**Seal and Signature of the Bidder/s.**

**Date:**

**Place:**

## LIST OF APPROVED BRANDS / MANUFACTURERS OF MATERIALS REQUIRING

<b>APPROVED MAKE OF MATERIALS (FURNISHING WORKS)</b>		
1	False Ceiling / Channels	India Gypsum / Armstrong / Saint Gobain
2	Wood Frame Work / Wood Section : All Wood, Must be well seasoned, free from knots, other defects decay and defects due to handling and Transportation. Wherever necessary, provide with anti – termite Treatment.	Malaysian Sal / Kapoor
3	Wood Skirting / Moulding / Lipping / Bidding	White Beach / White Ceader / CP Teak
4	Wood Preservative	STP Pentaphene Pale / Termiseal by PCI / Bison by British Paint
5	Fire Reterdant Paint	Industrial grads of Noble / Viper
6	BWR Ply (IS : 710)	Century (no Sainik) / Green (no Ecotec) / Sylvan
7	Flush Door / BWP Block board (IS : 1659)	Century (no Sainik) / Green (no Ecotec) / Sylvan
8	Laminate (1.0 mm thk.) (IS : 2046)	Green lam / Century mica / Sunmica / Airolam
9	Door Closure ( Heavy Duty )	Godrej / Archi / Sterling ( DC 2000)
10	Floor Spring ( Heavy Duty )	Godrej / Archi / Sterling ( FS 3000 )
11	Door Lock ( Dead )	Godrej / Hafele /Hettich / Kich / Doorset / Yale
12	Door Handles	Godrej / Hafele /Hettich / Kich / Doorset
13	Drawer / Storage Handle	Godrej / Hafele /Hettich / Kich / Doorset
14	Drawer / Storage Lock ( Multipurpose )	Ebco / Hafele /Hettich /Doorset
15	Night latch	Godrej / 4C Acme
16	Screws	GKW / Nettle fold
17	Hinges	CIEF
18	Sliding Telescopic Drawer Channel	Ebco / Earl Behari / Efficient Gadjets
19	Cable Organiser	Ebco / Innofitt Systems ( CM 63.C )
20	Adhesive	Fevicol SH / Fevimate TL
21	Soft Board	Jolly Board
22	Vertical Blinds	Mac / Annums / Window Fashion
23	Glass	Modi /AIS / Saint Gobain
24	Paints (Synthetic Enamel / Acrylic Emulsion)	Asain Paints / Berger / ICI
25	PVC Flooring	Krishna Vinyl / Armstrong / Birla
26	Texture Paint	Spectrum
27	Glass	Modi / AIS / Saint Gobain
28	European WC / Washbasin	Hindware /Parryware
29	Sanitary Fittings	Jaquar / Essco Delux
30	G.I. Pipe	Tata ( Medium )
31	Cement	Ultratech / Laferge / ACC
32	Footmat	Birla 3M / Approved Equivalent
33	Vitrified Tiles	Johnson / Naveen / Kajaria
34	Ceramic Tiles	Johnson / Naveen / Kajaria
35	Chairs	Godrej/Methodex/Monarch



**Note :**

If any of the approved brand(s) mentioned above is not available, equivalent make(s) as may be approved by the Employer / Consultants, is only to be used for the work.

<b>APPROVED MAKE OF MATERIALS</b>		
1	Switch fuse units (HRC)	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
2	Timer (TSQ 100)	L & T / HAVELLS
3	Voltmeter & Ammeter	A. E. / IMP
4	Voltmeter & Ammeter selector switches	KAYCEE / L & T
5	Phase indicating lamp	Vaishno / SIEMENS / ROSS controls
6	Capacitor	CROMPTON/SIEMENS
7	HRC fuses	GE power / SIEMENS / L & T / SCHNEIDER
8	Power Cable : XLPE	GLOSTER/POLYCAB/HAVELLS / FINOLEX
9	HRC fuse base & carriers.	GE power / SIEMENS / L & T / SCHNEIDER
10	1.1 KV grade PVC insulated armoured aluminium cable (ISI marked)	GLOSTER / NATIONAL / NICCO / HAVELLS
11	1.1KV / 600V grade PVC insulated & sheathed / insulated copper wire & flexible cords (ISI marked).	FINOLEX / HAVELLS / POLYCAB
12	RCCB / ELCB / MCCB	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
13	Moulded case circuit breaker	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
14	RCCB / ELCB	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
15	Switch fuse with rewirable fuses. (6A & 32A TPN)	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
16	Isolator	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
17	Changeover switch (on load type)	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
18	MCB distribution board	LEGRAND /SCHNEIDER / HAVELLS / SIEMENS
19	6/16 Amp modular type switch / flushed type plug socket	CRABTREE (athena) / LEGRAND (myrius) / SCHNEIDER (unicoplus)
20	6/16 Amp modular switch / socket, module plate & mounting M.S. / PVC box.	CRABTREE (athena) / LEGRAND (myrius) / SCHNEIDER (unicoplus)
21	16/25 Amp., 2 module electronic regulator	CRABTREE (athena) / LEGRAND (myrius) / SCHNEIDER (unicoplus)
22	Ceiling rose	KAY / EPP / ANCHOR / JJ
23	Holder	KAY / EPP / ANCHOR / JJ
24	Alarm bell	KHERAJ / GETCO
25	Black enamelled Steel conduits (conforming to IS in all respects)	BEC / SUPREME / AKG
26	Compression type brass gland	DOWELLS / JOHNSON / COMET
27	Cable termination socket	DOWELL'S

28	Light fitting & lamps	PHILLIPS / HAVELLS
29	Ceiling / Wall Mounted Fan	CROMPTON / POLAR / HAVELL'S
30	Exhaust fan	CROMPTON / POLAR / HAVELL'S
31	Industrial type socket & top	HAVELL'S / CROMPTON / LEGRAND
32	Telephone wire	FINOLEX / HAVELLS / POLYCAB
33	Starters	NORTH WEST / CRABTREE
34	All other items not covered above	As per sample approved by Employer/Consultant

Note 1. If the approved brands mentioned above are not available, equivalent make as may be approved by the client / consultant only to be used for the work.

**Annexure-2-**

**(Security Deposit -Bank Guarantee Proforma)**

To,  
The Regional Manager  
Estate& Establishment Dept.  
The New India Assurance Co. Ltd.  
Kolkata Regional Office

WHEREAS M/S ....., (hereinafter called "the Contractor") has undertaken, in pursuance of Tender Reference No.....dated ..... to undertake works titled "....."

AND WHEREAS it has been stipulated by you in the said Tender that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein, as security for compliance with the contractor's performance obligations in accordance with the contract.

AND WHEREAS we have agreed to give the contractor a guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Contractor , up to a total of Rs.....(in words.....) and we undertake to pay you, upon your first written demand declaring the contractor to be in default under the Tender and without cavil or argument, any sum or sums within the limit of Rs...../- ( Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the.....

Signature and Seal of Guarantors (Contractor's Bank) Date:

Address:

**Annexure-3**  
**(Agreement Draft)**

ARTICLE OF AGREEMENT

Article of Agreement made this at **Kolkata** in this ..... day of ..... 2023, between the **THE NEW INDIA ASSURANCE CO. LTD., Head Office, 87 M.G.Road. Mumbai 400001** (hereinafter called “the Employer” of the one part), and Name : **M/s .....** (Hereinafter called the contractor of the other part) where as the Employer is desires of having work titled **“INTERNAL REFURBISHMENT WORK AT EZRA STREET DIVISIONAL OFFICE, AT 14/1B, Ezra Street. Kolkata – 700 001 “** and has caused drawings and specifications describing the work and bills of quantities prepared through its appointed Architect **M/s. SUDIP SUR & ASSOCIATES, Address of Architect 14/2, Kali Kumar Mukherjee Lane. Sibpur. Howrah – 711 102, Registered Member, Council of Architecture, Govt. of India,** and whereas the said drawings have been seen, the specifications and/or the schedule of quantities have been signed by or on behalf of the partners have hereto the contractor and whereas the contractor has agree to execute upon and subject to all conditions of contract (all of which are collectively hereinafter referred to as “the said conditions”) the work shown upon the said drawing and/or described in the said specifications and included in the said schedule of quantities at the respective rates therein set forth amounting to the sum as therein arrived at of such other sum as shall become payable there under (hereinafter referred to as “the said contract amount”).

NOW IT IS HEREBY AGREED AS FOLLOWS

1. In consideration of the said contract amount to be paid at the time and in the manner set forth in the said conditions execute and complete the work shown upon the said drawings and described in the said specifications and the schedule of quantities, either in whole or impart.
2. The employer shall pay the contractor they said contract amount or such other sum as shall become payable at the time and in the manner hereinafter specified in the said conditions.

The term “the Architects” in the said conditions shall mean the said **M/s. SUDIP SUR & ASSOCIATES, Address of Architect 14/2, Kali Kumar Mukherjee Lane. Sibpur. Howrah – 711 102.** or in the event of their death or ceasing to be the architects for the purpose of this contract, such other person or persons as shall being a nominated for the purpose by the employer not being a person to whom the contractor shall object for reasons (maintained in said conditions) considered to be sufficient by the employer. Provided always that no person or persons subsequently appointed to be architects under this contract shall be entitled disregard or over rule any previous decision or approval or direction given or expressed in writing by the architects for the time being.

3. The said conditions an appendix shall be read and construed as forming part of this agreement and the parties hereto shall respectively abide by to submit themselves to the

conditions and perform the respective agreements on their part as contained in the said conditions contained.

The Architect refers to M/s. **SUDIP SUR & ASSOCIATES**, Address of Architect 14/2, Kali Kumar Mukherjee Lane. Sibpur. Howrah – 711 102.' while designated officer will be nominated officer of **THE NEW INDIA ASSURANCE CO. LTD.**

4. The plans, agreement and documents mentioned here in shall from the basis of this contract.
5. The contract is neither a fixed lump sum contract nor a piece work contract, but is a item rate contract to carry out work in respect of **“name of tender.....“** and also some addition and alteration works to be paid for according to actual measured quantities at the rates contained in the schedule of rates and probable quantities as provided in the said conditions.
6. The contractor shall afford every reasonable facility for the carrying out of the all works relating to **“name of tender.....** ..... **“** and Preparing the furniture work and other ancillary works in the manner laid down in the said conditions, and shall make good and damage done to walls, floors etc. after the completion of his work.
7. The Employer through the architect and designated officer reserves to himself the right of altering the drawing and nature of the work of having portions of the same carried out without prejudices to this contract.
8. The said conditions shall be read and construed as forming part of this agreement and the parties hereto will respectively abide by to submit themselves to the conditions and stipulations and perform the agreements of their parts, respectively in such conditions contained.
9. Time shall be considered as the essence of this agreement and the contractor hereby agrees to commence the work soon after the formal work order issued to him and complete the entire work within **30** days.
10. All payments by the Employer under this contract will be made only at Kolkata Regional Office.
11. All disputes arising out or in any way connected with this agreement shall be deemed to have arise in **Kolkata**, and only the Courts in **Kolkata** shall have jurisdiction to determine the same.
12. The several parts of this contract have been read and fully understood by the contractor. In witness whereof the employer if the contractor have set partnership or an their

respective hands to these individual. Presents and two duplicates here of the day and year first here in above written.

In witness where of the parties hereof the Employer if the contractor has set its hand to these company.

Presents its duly authorized official and the contractor has caused its common seal to be affixed hereunto and the said two duplicates has caused these presents and the said two duplicates hereof to be excavated on its behalf, the day and year first herein above written.

SIGNATURECLAUSE

SIGNED AND DELIVERED BY M/S \_\_\_\_\_.

By the hand of Shri \_\_\_\_\_ Proprietor

In the presence of 1.

.....

..... Witnesses :

If the party is a partnership firm or an individual should be signed by all or on behalf of all the partners.

SIGNED AND DELIVERED BY

In the Presence of 2.

.....

..... Witness:

THE COMMON SEAL OF .....