

CAMPUS DEVELOPMENT FOR M/S. SRIRAM EDUCATIONAL INSTITUTIONS, VYASARPADI, CHENNAI.

VOLUME I – TENDER DOCUMENT FOR ARTS & SCIENCE COLLEGE COMPOSITE INTERIOR WORKS



ARKIE ATELIER DESIGN INDIA [P] LIMITED

Architecture

Interior Design

No.6 Venus Colony I 2nd Street I Alwarpet I Chennai I TN I India I Pin - 600 018 T : 91 - 44 - 4314 2200 info@aadindia.com www.aadindia.com

- Name of the Work : Composite Tender for Interior and Electrical Works for Proposed Interior Works for Arts & Science College at M/s. Sriram Educational Institutions, Vyasarpadi, Chennai.
- Name of the Employer : M/s. Sriram Educational Trust, No. 49, Anna Salai, (Inside Devi Theatre Complex) Chennai – 600 002.

:

Name of Tenderer

Name of the Architects : M/s. Arkie Atelier Design India [P] Limited, No. 6, Venus Colony 2nd Street, Alwarpet, Chennai – 600 018.

M/s. SRIRAM EDUCATIONAL TRUST, CHENNAI

COMPOSITE TENDER FOR INTERIOR AND ELECTRICAL WORKS FOR PROPOSED INTERIOR WORKS FOR ARTS & SCIENCE COLLEGE AT M/S. SRIRAM EDUCATIONAL INSTITUTIONS, VYASARPADI, CHENNAI.

TENDER INFORMATION

| 1. | NAME OF WORK | : | INTERIOR AND ELECTRICAL WORKS for proposed Interior works for Arts & Science College at M/s. Sriram Educational Institutions, Vyasarpadi, Chennai |
|-----|---|---|---|
| 2. | PERIOD OF SALE OF TENDER | : | From the date of Publication of Tender Notice. |
| 3. | AVAILABILITY OF TENDER | : | Can be downloaded from www.sriramtrust.org website |
| 4. | COST OF TENDER DOCUMENT | : | At free of cost |
| 5. | EARNEST MONEY DEPOSIT | : | EMD shall be in the form of Demand Draft (valid for 3months) in favour of Sriram Educational Trust Payable at Chennai . -The EMD shall be Rs. 80,000/- |
| 6. | PRE-BID MEETING | : | Nil |
| 7. | LAST DATE OF SUBMISSION OF TENDER | : | 27.02.2024 before 2.30 PM – M/s.Sriram Educational Trust Office |
| 8. | DATE & TIME OF OPENING OF TENDER | | Will be informed later |
| 9. | PLACE OF SUBMISSION & OPENING OF TENDER | : | The Secretary M/s. Sriram Educational Trust, No.49, Anna Salai, Chennai, Pin: 600 002. Ph.No:044 – 2851 1011/22/33; Mail: sriramet1983@gmail.com |
| 10 | VALIDITY OF TENDER | : | 90 Days from the date of bid opening (which may be extended by mutual agreement). |
| 11. | PERIOD FOR MOBILISATION | : | 07 days from the date of issue of LOI or written order to commence work or after the date on which the site is handed over to the contractor whichever is later. |
| 12. | PERIOD OF COMPLETION | : | 03 months from the last day of mobilisation period for completion of All building including peripheral work in all aspects. |
| 13. | DEFECTS LIABILITY PERIOD | : | 1 (One) Year from the date of completion and acceptance of works. Acceptance will be done building wise. |
| 14. | TYPE OF CONTRACT | : | Item rate contract. (Measure and pay contract). |
| 15. | LIQUIDATED DAMAGES | : | 0.5% per week to a maximum limit of 5% of contract value for individual blocks. |

| 16. | PAYMENT TERMS | | : | a. Interest free mobilisation advance to an extent of 20% of the contract value against submission of advance Bank Guarantee from any Nationalised bank as per the format issued by us. The advance shall be recovered @ 21% from first running bill onwards subject to full recovery till the amount of work done as per Running bill does not exceed 95% of the value of Contract. 50% of the mobilization advance will be paid along with the order and balance 50% will be paid after successful mobilisation of men and material at the construction site. A single Advance Bank Guarantee shall be submitted for full amount BG by the successful bidder. The Advance BG will be released only after full recovery of mobilisation advance for the submitted value. |
|-----|----------------------------|-------------|---|---|
| | | | | b. Up to 50 % of cost of material delivered at site (Plywood, laminate, Veneer, hardware, light fixture, false ceiling etc.) in lots with approval by M/s. Sriram Educational Trust. Invoice/PO copy shall be produced by contractor for claiming the advance payment. Each of these payments will be adjusted in the subsequent RA bill. |
| | | | | c. Up to 95% progressive payment against RA Bills. |
| | | | | d. 2.5% upon (if more than one building then building wise) completion and acceptance and against receipt of Test report and acceptance by us. |
| | | | | e. 2.5% retention payment will be released against submission of Retention Bank guarantee for equivalent amount as per the format enclosed valid for entire defects liability period. |
| | | | | All the bank guarantees should be in favour of Sriram Educational Trust, Chennai. |
| 17. | PERFORMANCE GUARANTEE | BANK | : | Nil. |
| 18. | MINIMUM | ELIGIBILITY | : | Bidder : |
| | CRITERIA TO BE I BIDDER | MET BY THE | | (i) Should be as Sole bidder and the bidder shall be a registered entity under relevant Act in India. The Sole bidder shall be a Proprietorship firm or Partnership Firm or |

Limited Company.

- Should possess adequate previous experience, expertise and capability in interior execution of similar projects in Tamilnadu, preferably within Chennai;
- (iii) Should have executed at least two such projects in the last three years ending March 2023 costing not less than Rs.0.9 Crore each or one project of not less than Rs.1.7 crore;
- (iv) Should be directly responsible for execution of the project by positioning necessary infrastructure and full-fledged project office in Chennai. No subcontracting is allowed unless specifically permitted by the Trust;
- (v) Should not be under liquidation, court receivership or similar proceedings
- (vi) Annual turnover should have been Rs.2.0 Crore during at least three of the preceding three financial years (i.e.2020– 21 to 2022-23).

FIRM DETAILS

| Name of Firm | |
|--|-------|
| Address of Firm with contact Phone and Mobile No: | |
| Local Address of Firm with contact Phone and Mobile no | |
| Email Id: | |
| PAN No: | |
| TAN No: | |
| TIN / VAT No: | |
| CST No: | |
| GST Registration No: | |
| ESI / PF Registration No : | |
| Any other Registration details relevant to the contract | |
| Name of Bank with address: | |
| Branch Code: | |
| Type of Account: | |
| Account No: | |
| 9 Digit MICR Code no: | |
| Annual Turn Over : | |
| 1. 2020-2021 | |
| 2. 2021-2022 | |
| 3. 2022-2023 | ····· |

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CHECK LIST

| SI.No. | Details | Please Tick |
|--------|--|----------------|
| 1 | Tender Document as issued - every page dully filled, sealed and signed by the authorised signatory | |
| 2 | EMD enclosed for an amount of Rs. 80,000/- vide DD no:dated drawn ondrawn on Bank payable at Chennai | |
| 3 | Duly Filled in Company Details | |
| 4 | Duly filled in Tender Form | |
| 5 | Duly Signed in Letter of Submission from contractors. | |
| 6 | Appendix – A to be signed by Bidder for Terms & Conditions of Contract | |
| 7 | Appendix – B to be signed by Bidder for Bank Guarantee | |
| 8 | Appendix – C to be signed by Bidder for Details of Management / Technical Team to be deployed | |
| 9 | Appendix – D to be signed by Bidder for Bank Details of Plant, Machinery, Equipment proposed to be deployed for the project | |
| 10 | Appendix – E to be signed by Bidder for Methodology and Quality control for the project | |
| 11 | Site Organization Chart specific to the project | |
| 12 | Duly filled in up - Names of Associate agencies to be engaged by the contractors in executing the Services works (Eg: Electrical, PHE, Fire Fighting etc.) | |
| 13 | "Bill of Quantities" with rates and amount duly filled in | |
| | | |

Signature of tenderer with seal

TENDER NOTICE

- 1. Sealed Tenders for the above work will be received by **The Secretary**, **M/s. Sriram Educational Trust**, **No.49**, **Anna Salai**, **Chennai Pin: 600 002** on behalf of **M/s. Sriram Educational Trust**, **Chennai** from the pre-qualified tenderers only.
- 2.a. The tenders must be submitted in sealed covers and should be addressed to **The Secretary**, **Sriram Educational Trust**, **No.49**, **Anna Salai**, **Chennai Pin: 600 002** with the name of the tenderer and the name of the work written on the top of the cover.
- b. If the tender is made by an individual, it shall be signed with his full name and address. If it is made by a firm it shall be signed with the co-partnership name by a member of the firm who shall also sign his name and the name and address of each member of the firm shall be signed by a duly authorised officer, who shall produce with his tender, satisfactory evidence of his authorisation. Such tendering corporation may be required before the agreement is executed to furnish evidence of its corporate existence.
- 3. Every tenderer is expected, before quoting his rates to inspect the site of the proposed work, to ascertain the access, availability of space for storing materials, water, power and other facilities. Any dewatering, access road required to be done by the contractor.
- 4.a. Every tenderer must enclose with his tender, earnest money by a crossed demand draft on any nationalised bank for a sum as detailed in the tender information form in favour of Sriram Educational Trust, payable at Chennai as earnest money. The Earnest Money will be refunded to the unsuccessful tenderer after intimation of rejection of the tender or at the expiry of three months from the date of tender, whichever is earlier. The Earnest Money will not carry any interest.
- b. The Earnest Money will be retained in the case of successful tenderer and will not carry any interest. EMD will be returned once PBG is submitted by the finally selected contractor.
- c. The tenderer whose tender is accepted shall execute an agreement as per the format of Articles of Agreement in this tender within 15 days of LOI or Work order whichever is later.
- 5. The tenderer shall peruse carefully the tender notice, conditions of contract, bills of quantities, relevant drawings, outline specifications and general conditions etc., before pricing in the quantities. All these documents shall be returned with the tender duly signed on every page in token of acceptance of the conditions.

The tenderer shall quote all-inclusive rates but excluding GST. Bidders shall quote separately the component of goods and service tax for the overall cost of the project. (The component of goods and service tax should not be included in the unit rate of the items). The sum payable shall be calculated on the basis of the unit prices specified in the contract and of the work actually executed.

All other taxes and duties in force as on date have been included in your item rates/prices. We shall deduct TDS under income tax act unless you shall submit no deduction certificates from your respective tax assessing authorities.

- 6. **The Clients, M/s. Sriram Educational Trust,** do not bind themselves to accept the lowest or any tender and reserves the right to reject any tender or all the tenders or split the scope of work between two or more contractors without assigning any reason therefore.
- 7. **The Client** reserves the right of altering and / or amending the drawings and scope of work by additions or alternations or omissions or having a portion of the work carried out by another agency without assigning any reason thereof.

The following documents should be enclosed with the tender duly signed and filled in:

- (I). BID DOCUMENTS
 - a) Tender Notice

- b) Tender Form
- c) Conditions of Contract
- d) Articles of Agreement
- e) Schedule of Quantities for all the works
- f) Technical Specifications
- g) Safety Manual
- h) Tender Drawings.

(II). COMPANY PROFILE

- (III). Method Statement on how the tenderer proposes to mobilise Men, Materials and Equipment, -Execute the works as specified.
- (IV). Details of Site Organisation Chart proposed by the Tenderer
- 8. Tender should be valid for **90 Days** from the date of bid opening which may be extended under mutual agreement.

DATE

THE SECRETARY,

M/S. SRIRAM EDUCATIONAL TRUST.

:

TENDER FORM

То

THE SECRETARY M/s. Sriram Educational Trust, No.49, Anna Salai, (Devi Theatre Complex) Chennai - 600 002.

Dear Sir,

1. Having examined the drawings, specifications, designs and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender, I/we hereby offer to execute directly, the works specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in conditions of tender, the Articles of Agreement, Special Conditions, Schedule of Quantities and Conditions of Contract and with such materials as are provided for, by, and in all other respects in accordance with such conditions so far as they may be applicable.

MEMORANDUM

| a). | Description of works | | INTERIOR AND ELECTRICAL WORKS for proposed Interior works for Arts & Science College at M/s. Sriram Educational Institutions, Vyasarpadi, Chennai – 600 039. |
|-----|-------------------------------|---|--|
| b). | Earnest Money | : | As mentioned in tender information SI.No.5. |
| c). | Period of completion | | As mentioned in tender information SI.No 12. |
| d) | Payment Terms | | As mentioned in tender information SI.No.16. |
| e) | Performance Bank Guarantee | : | As mentioned in tender information SI.No.17. |

- 2. Should this tender be accepted, I/we hereby agree to abide by and fulfil the terms and provisions of the said Conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to **M/s. Sriram Educational Trust, Chennai** as the case may be the amount mentioned in the said contract vide SI.No: _____ of General Instructions and Notice inviting tender.
- 3. I/We have deposited a sum of Rs. _____ (Rupees ______) as earnest money with the, which amount is not to bear any interest. Should I/we fail to execute the contract when called upon to do directly immediately after the issue of letter of acceptance by **SRET** as the case may be, I/we do hereby agree that this sum shall be forfeited by me/us to **SRET**.
- 4. The lists showing the names of manufacturers of specialized items as required are enclosed.

| 5. | Our bankers are: | | | |
|--------|---|---|--|--|
| | i) | | | |
| | ii) | | | |
| | The names of partners of our firm are | : | | |
| | i) | | | |
| | ii) | | | |
| | Name of the partner of the firm Authorised to sign | : | | |
| | Or | | | |
| | Name of person having Power of Attorney to sign the contract. (Certified true copy of the Power of Attorney should Be attached) | : | | |
| Yours | faithfully, | | | |
| Signat | Signature of Tenderer / Contractors. | | | |

WITNESSES:

| i) | Signature | : | ii) | Signature | : |
|----|------------|---|-----|------------|---|
| | Occupation | : | | Occupation | : |
| | Address | : | | Address | : |

ARTICLES OF AGREEMENT

(FORMAT)

BETWEEN

M/S. Sriram Educational Trust, No. 49, Anna Salai, Chennai – 600 002, (hereinafter called "SRET" or "the Owner" or "Client") of the one part;

AND

M/s..... (Hereinafter called "the contractor" of the other part) represented by

WHEREAS the Client is desirous of appointing a contractor for Interior and Electrical Works for proposed Interior works for Arts & Science College at Project Site, RS No. 501/3, Block 26 of Perambur Village, No.1/2, Stephenson Lane, Vyasarpadi, Chennai – 600 039 (hereinafter called "the Work") and has caused drawings, Schedule of Quantities and specification showing and describing the work to be done as prepared by or under the direction of **M/s. Arkie Atelier Design India [P] Limited**, No.6, Venus Colony Second Street, Alwarpet, Chennai – 600 018 (hereinafter called M/s. AAD Architects or referred to as "**the Architect**").

AND WHEREAS the Client is also desirous of appointing a Project Management Consultant (hereinafter called "Consultant") for the project, in order to ensure smooth coordination between various stake holders and to ensure the time, quality and to provide effective cost control.

AND WHEREAS the said documents numbered as per list attached to the Bid document covering conditions, the specifications and the Schedule of Quantities initiated by the client have been signed by or on behalf of the parties hereto.

The client agrees to award contract for execution of the work to the contractor and the contractor agrees to execute the same as per the terms and conditions as mentioned in the tender documents.

tender conditions, in which case a fresh Bank Guarantee shall be provided by the contractor to cover the extended period of the project towards extending the performance bond.

AND WHEREAS the Contractor has supplied the Client with a fully priced signed originals of the said Schedule of Quantities (hereinafter referred to as "the contract Bills) AND WHEREAS the said Drawings (hereinafter referred to as "the Contract Drawings") and the Contract Bills have been signed by or on behalf of the parties hereto.

NOW IT IS HEREBY AGREED AS FOLLOWS:

- 1. For the consideration hereinafter mentioned, the **Contractor** will upon and subject to the contract Documents carry out and complete the Works shown there in, described by or referred to in those Documents.
- 2. The plans, agreement, and documents mentioned herein shall form the basis of this Contract.
- 3. The Client reserves the right of altering the Drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract. There shall be no limit on the scope and extent of changes that can be ordered by the Client and the Contractor shall not be entitled to any compensation or claim due to such change (s) / Order (s) by the Client. The Contractor will only be paid for the actual quantity of works done payable at the accepted unit rates.
- 4. The term "the Architect" in the said Conditions shall mean M/s. AAD Architects, or in the event of their ceasing to be the Architects for the purpose of this Contract, such other person as may be nominated for that purpose by the Client, not being a person to whom the Contractor shall object for reasons considered to be sufficient by an Arbitrator appointed in accordance with Article. No15. Provided always that no person subsequently appointed to be the Architect shall be entitled to disregard or overrule any certificate or opinion or decision or approval or instruction given or expressed by M/s. AAD Architects until the time of appointment of new Architects.
- 5. The said conditions, specifications, priced bill of quantities and contract drawings shall be read and construed as forming part of this Agreement and the parties hereto shall respectively abide by and submit themselves to the Conditions and perform the agreements on their parts respectively in such conditions, specifications, priced bill of quantities and contract drawings contained.
- 6. The Client will pay to the Contractor the sum of Rs....../- (Rupees/- (Rupees) only (hereinafter referred to as "the Contract Sum") or such other sum (exclusive of GST from time to time and subject to all statutory deductions as may be necessary) as shall become payable hereunder at the times and in the manner specified in the said Conditions.
- 7. This Contract is an item(s) rate Contract to carry out the work in respect of INTERIOR AND ELECTRICAL works, The Contractor shall be paid for the actual quantity of work done, as measured

at site, at the accepted unit rates contained in the Contract bills.

8. The contractor shall provide all necessary assistance and co-operation to the Consultant/Client for checking, verification of the bill including providing legibly prepared M. Books duly signed by the contractor's authorised representative, providing all necessary supporting documents wherever necessary and extending assistance while verifying measurements at site.

9. Payment Terms:

The client shall make payments to the contractor in the following manner;

a. Mobilisation Advance: 20% (twenty percent) of the contract value

An advance of 20% (twenty percent) of the total contract value towards mobilisation and commencement of work as per tender, against Bank Guarantee for equivalent sum to be provided by the contractor.

The advance payment shall be recovered @ 22.5% from first running bill onwards subject to full recovery till the amount of work done as per Running bill does not exceed 90% of the contract value.

b. Ad-hoc Payment on delivery of materials at Site: 50% (Fifty percent) of the value of materials

On delivery of certain materials at site, agreed as per tender conditions namely plywood, laminate, veneer, hardware, light fixture, false ceiling etc. in lots with approval by SRET/Consultant. Invoice/PO copy shall be produced by contractor for claiming the advance payment. Materials shall be reconciled as per final theoretical value and excess supplied shall be contractor's responsibility and will not be paid for. Each of these payments will be adjusted in the subsequent RA bill.

c. Against Progressive RA Bills:

95% (Ninety Five percent) of the value work done after necessary deductions (including advance recovery and retention money) shall be paid by the client to the contractor based on bills to be certified by the Consultant/Client

5% of each RA bill shall be retained as **Retention money** and will be released as per Article No.10.

d. RA Bill Payment Period:

All payments by the Client under this contract will be made only at Chennai in Indian Rupees within 15 working days from the date of submission of bill. The bills shall be submitted in the standard format only after taking actual measurements for the completed work and properly recorded in the Measurement books (M-books).

If the bills are not cleared within the specified time period, then 60% Ad-hoc payment shall be made against the value of the submitted bill. Ad-hoc payment will not be permitted for the final bill.

e. Final Bill Payment Period:

The total final payment will be released after completion of the entire work, after deducting all recoverable advances and retention money based on the certification of bills and clearance of snag list and handing over. Quantities of works executed shall be certified by Consultant/Client.

The final payment will be made within a period of one (1) month after completion of contract and due verification of final bill with all necessary supporting documentation such as handing over documents, manual & warranty or guarantee certificates of installed equipment, test reports etc. as per the tender conditions.

The contractor shall complete all jobs including snag closure to the satisfaction of the Consultant / Client before submission of final bill.

The final payments will be made by the client only after satisfactory closure, completion and formal handing over of the premises to the client.

10. Retention Money:

5% of all the certified payment values shall be deducted as Retention Money against each RA bill.

a. Refund of Retention Money:

- i. 50% of the Retention money shall be released after Virtual Completion of the building block wise upon verification and certification of bill and after attending to snags, if any as may be identified by the Consultant /Client and to the satisfaction of the client.
- Balance 50% of the retention money shall be released against submission of Retention Bank Guarantee for equivalent amount as per the format enclosed valid for entire Defects Liability Period (Twelve months). Retention money shall not bear any interest.

11. TDS:

On all payments to be made, the client shall deduct tax at source under the prevailing provisions of the Income tax Act and GST Act at such rate as may be prescribed.

12. Defects Liability Period:

The defects liability period will be 12 months from the date of issue of virtual / substantial completion certificate by Consultant/Client. Acceptance will be done building wise. All defects in material or workmanship shall be rectified/ replaced free of cost within 3 days of notification to the satisfaction of the Consultant/Client. Liquidated damages will be imposed (not as penalty) as per clause 14 of this articles of agreement, if failure to rectify or replace the defective material or workmanship within the above mentioned period.

13. Contract Period:

Date of Commencement:

Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work within 7 days (mobilisation period) of issuing LOI or written order to commence the work or after the date on which the site is handed over to the contractor whichever is later.

Date of Completion:

The works in all respects shall be completed and handed over at the site to the Client within 6 months from the last day of mobilisation period including days of inclement weather conditions except the extended period as granted by the Client.

14. Liquidated Damages:

0.5% per week to a maximum limit of 5% of total contract value for individual blocks will be deducted as Liquidated damage for failure to complete the project within the specified period and failure to carry out rectification of defective works during the execution and the defects liability period as may be identified by the Consultant/Client.

15. Settlement of Disputes:

If either of the parties to this agreement raises any dispute on any issue relating to the terms and conditions or any matter, the party concerned may seek settlement through Arbitration proceedings in accordance with Indian Arbitration and Conciliation Act 1996 as amended. The venue of Arbitration shall be Chennai. The Arbitration proceedings shall be before a Sole Arbitrator nominated by the Client. The Governing Law of this Agreement and of the relations of the parties arising from it and of any arbitration pursuant to it shall be the laws of the Republic of India. Provided always that the Client shall not withhold the payment nor the contractor except with the consent in writing of the Consultant in any way delay the carrying out of the works by reason of any such "matters, question or dispute being referred to Arbitration but shall" "proceed with the work with all due diligence and shall, until completion" "of Arbitration proceedings, relieve the Main contractor of his" obligations to adhere strictly to the client and Consultant's instructions with regard to the actual carrying out of the works. "Further disagreement, if any, after the Arbitration Award may be" resolved through Court of Law. All such disputes arising out of matters in connection with this agreement shall be deemed to have arisen at Chennai and only courts in Chennai shall have the jurisdiction to determine the same. "The work shall however be progressed as per time scheduled, independent" of such exigencies unless the client desires otherwise.

16. Law:

Indian Law shall apply to this Agreement.

All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Chennai and only Courts in Chennai shall have jurisdiction to resolve the same.

- 17. The Contractor shall have every reasonable facility for the carrying out of all the works relating to the provision of INTERIOR AND ELECTRICAL in the manner laid down in the said Conditions.
- 18. The contractor agrees that the all the parts (Tender conditions, Technical Specification, priced schedule of quantities, tender drawings etc.) this Contract have been read by the Contractor and fully understood by the Contractor.
- 19. This Agreement and the said Conditions of contract, specifications, priced bill of quantities and drawings shall together constitute the Agreement between the Client and the Contractor. Any variation thereof after the date of this Agreement shall only be by written consent of the parties to this agreement.

As Witness our hand the day and year first above written

Signed by the Said Client:

| Signature | : | Date |
|-------------|---|------|
| Name | · | |
| Designation | : | |

In the Presence of Witnesses:

| Signature | : | Date: |
|-------------|---|-------|
| Name | : | |
| Designation | : | |
| | | |

| Signature | : | Date: |
|-------------|---|-------|
| Name | : | |
| Designation | : | |

Signed by the Said Contractor (s):

| Signature | : |
|-------------|---|
| Name | · |
| Designation | : |

In the Presence of Witnesses:

| Signature | : | Date: |
|-------------|---|-------|
| Name | : | |
| Designation | : | |

| Signature | : | Date: |
|-------------|---|-------|
| Name | : | |
| Designation | : | |

Date:

GENERAL INSTRUCTIONS AND NOTICE INVITING TENDER

 Tender documents are obtainable/downloaded from the website at free of cost as specified in tender information section. Sealed Tenders should be addressed to THE SECRETARY, Sriram Educational Trust, No.49, Anna Salai, Chennai – 600 002 and super scribing the name of the tender on the top left hand corner of the cover and sent so as to reach him not later than 27.02.2024 before 2.30 PM

The tender document consisting of Conditions of Contract, Specifications and Schedule of Quantities shall be submitted in original. All the enclosures Tenderers wish to submit shall be in triplicate.

- 2. No tender will be received after **2.30 PM on** 27.02.2024 under any circumstances whatsoever.
- 3. The tenderer must use only the prescribed forms issued by us, to fill in the rates.
- 4. **SRET** discourages stipulation of additional conditions by the tenderers, as they are expected to accept the various provisions and conditions in the tender documents. No conditional tender will be accepted.
- 5. Tenderers must sign and affix their seal in all pages of the tender and also tender drawings.
- 6. If the tenderer desires to submit a covering letter with his tender, he may do so, but the covering letter shall not contain any reference to the amount of his tender or any financial aspect of tender. The tender shall be submitted in a sealed single (contains Part I & II in separate cover) cover with the name of work superscribed. The tender is to be submitted in two parts, each in a different sealed Envelope duly marked. The envelope for Part I shall be marked as Technical Bid on the outside and that for Part II shall be marked as Financial Bid. Part I should contains tender document, Technical Specifications, Drawing and along with the Earnest Money Deposit. Part II should contain Bill of quantities. The tender shall be submitted to The Secretary, Sriram Educational Trust, Chennai in a sealed cover with the name of work super-scribed, before the due date.
- 7. If the sealed tenders are sent by post or courier service, the tenderers shall ensure that the tenders are posted or despatched sufficiently early so that the tenders are received by M/s. Sriram Educational Trust, within the stipulated time. The cover shall be addressed to The Secretary, Sriram Educational Trust, Chennai 600 002. If the tenders are to be delivered in person at the above address, the sealed tenders shall be deposited before the stipulated time, at the aforesaid office.
- 8. **SRET,** have the right to reject any tender that does not comply with the above procedure and stipulations.
- 9. Contractor to make his own arrangements for Water and Power for his scope of work.

The insurance cover under the responsibility of the Contractor referred above does include transit insurance for safety of materials /goods /equipment & machinery of any kind in transit as per requirement of the respective specialised work which shall be the responsibility of Contractor.

The retention money pertaining to the work of Contractor shall remain in the custody of **SRET** until the conditions of contract are fully met and until reaching the time of release of retention money as governed in the agreement between the Contractors. Such retention money shall not attract any interest.

- 10. **SRET** reserves full discretion to award part of the work to any other agencie(s) if they so desire and the tenderer shall not be entitled to withdraw his tender on this account and any such withdrawal will entail forfeiture of the earnest money deposited with the tender. No compensation or extension of time shall be granted under such circumstances.
- 11. In cases, where the work of the Contractor as approved by **SRET** is not to specifications or the progress is not satisfactory, **SRET** / Consultant will be at liberty to cause to stop further work by such Contractor and engage another Contractor as selected by **SRET**, failing which **SRET**, will be at liberty to get such works executed by any other agencies at the cost of the Contractor so dispensed.
- 12. (a) The tender form must be filled in English and all entries must be made by hand and written in ink. If any of the documents is missing, or unsigned, the tender may be considered invalid by **SRET**,

in its discretion.

- b) Rates should be quoted both in figures and words in columns specified. In case of discrepancy between the rates quoted in figures and words, the rates quoted in words shall prevail for the correct amount. All erasures and alterations made while filling the tender must be attested by initials of the tenderer and stamped. Overwriting of figures is not permitted; failure to comply with either of these conditions will render the tender invalid and it will be the option of SRET, to accept or reject the tender. No unsolicited advice of any change in rate or conditions after the opening of the tender will be entertained.
- (c) Each page of the tender documents should be signed by the person or persons with seal of authority submitting the tender in token of his/their having acquainted himself/themselves with the General Conditions of Contract, Specifications, Special Conditions, etc., as laid down. Tender documents not so signed will be rejected.
- d) The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract. Otherwise the tender may be rejected by **SRET**.
- 13. **SRET**, do not bind itself to accept the lowest or any tender and reserve to itself the right to accept or reject any or all the tenders, either in whole or in part, without assigning any reason for doing so.
- 14. On receipt of intimation from **SRET**, of the acceptance of his/their tender, the successful tenderer shall be bound to implement the contract with the Client.
- 15. On the Consultant/Client representative certificate of completion of the works subject to acceptance by **SRET**, the retention money would be refunded after one year of defect liability period commencing from the date of taking over by the Client. The amounts retained by the Client shall not bear any interest.
- 16. The Contractor shall not assign the Contract. No portion of the Contract / Sub-Contract shall be sublet except with the written consent of the Client which shall be given with prior approval of SRET. In case of breach of these conditions, the Client may serve a notice in writing to the Contractor rescinding the Contract whereupon the Performance Bank Guarantee and retention money shall stand forfeited to the Client, without prejudice to his other remedies against the Contractor and specifically the remedy under clause.32 of the General Instructions and Notice Inviting Tender.
- 17. The Contractor shall carry out all the work strictly in accordance with Drawings, details and instructions of the Consultant. If in the opinion of the Consultant changes have to be made in the design and with the prior approval in writing of the Client they desire the Contractor to carry out the same, the Contractor shall carry out the same without any extra charge. The Client / Consultant's decision in such cases shall be final and binding on the Contractor.
- 18. A Schedule of Probable Quantities in respect of each trade of work covered in this document is liable to alteration without any pre-specified limit to extent of such variations by omissions, deductions or additions at the discretion of the Client /Consultant. Each tender should contain not only the rates but also the value of each item of work entered in the amount column and all the items should be totalled in order to show the aggregate value of the entire tender. The value of each item worked out shall be rounded off to a nearest rupee ignoring paise below fifty.
- 19. The tenderer must obtain for himself on his own responsibility and at his own expense all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the Drawings and must inspect the site of the work and acquaint himself with all local and site conditions, means of access to the work, nature of the work, availability of any infrastructure and all matters appertaining thereto. Ignorance of the site conditions shall not be accepted by the Client as a basis for any claim for compensation.
- 20. The rates quoted in the tender shall include all charges for clearing of site before commencement as well as after completion.

The rates quoted in the tender shall include all charges of providing water, electricity (power), scaffolding, staging, planking, fencing, hoarding, storage sheds, approach road to the work area,

dewatering and bailing of water if any, applicable toll pay at entry exit, watching and lighting by night as well as day including Sundays and Holidays, temporary plumbing and electric supply and removal of any or all such scaffolding, staging, planking, as occasion shall require or when ordered to do so, and fully reinstate and make good all matters and things disturbed during the execution of work to the satisfaction of Client / Consultant shall be the responsibility of Contractor.

The rates quoted shall be deemed to be for the finished work to be measured at site. Every item relating to supply and installation of equipment in whole or part shall include all components, sub systems or parts whether specifically mentioned in these documents or otherwise in order that the equipment is fully functional conforming to the specification and shall be capable of performing the duties expected thereof. No additional rate or claim shall be allowed for the tenderer's omission to include in his quoted rates for any component covered in the respective description, specification, drawing etc.

The rates shall also be firm and shall not be subject to variations in costs of any or all inputs, exchange variations, labour conditions, fluctuations in railway freights or any conditions whatsoever. The rates shall include transit insurance wherever required for Safety of materials / goods / equipment's in transit and any other similar contingencies

- 21. The Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self-supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract. No claim shall be entertained on this account.
- 22. Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the Contractor and it shall be reckoned from the date of award of work/letter of acceptance as the case may be. The successful tenderer shall before commencing work prepare a detailed work programme, which shall be approved by the Consultant and Client. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period he shall be liable to pay liquidated damages (not as penalty) as defined in clause 42 of the Conditions of Contract. The amount of levy of liquidated damages (not as penalty) shall however be to the credit of **SRET**.
- 23. The rates and amounts for the alternative items if any specified in the Schedule of Probable quantities shall be filled in without which the tender will not be considered. The Client reserves the right to adopt any of the alternative items, either in scrutinizing and deciding upon the tender or later when the works are being executed.
- 24. 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 of delays may be, including delays arising out of modifications to the work entrusted to him or in any other sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works or in procuring Government controlled or other building materials or in obtaining water and power connections for execution purpose or for any other reason whatsoever and the Client shall not be liable for any claim in respect thereof. The Client does not accept liability for any sum besides the tender amount, subject to such variations as are provided for herein.
- 25. The successful tenderer is bound to carry out any item of work necessary for the completion of the job even though such item(s) is or are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Consultant with the prior consent in writing of the Client.
- 26. The successful tenderer must co-operate with the other Contractors working at site appointed by the Client so that the work shall proceed smoothly with least possible delay and to the satisfaction of the Client.
- 27. The successful tenderer must bear in mind that all the work shall be carried out strictly in accordance with the Specifications made by the Consultants and also in compliance of the requirements of the local/ public authorities and to the requirements of Client and no deviation on any account will be permitted.

- 28. The successful tenderer shall make his/their own arrangement to obtain all materials required for the work if any involved. While making the tender, the tenderer should keep his rates firm till the completion of work and no price variation therefore shall be considered for any reason whatsoever involved in the works if any.
- 29. The Contractor shall strictly comply with the provision of safety code. The Contractor shall keep the Client fully indemnified against any claims or liabilities arising out of Contractor's lapse in safety practices.
- 30. The amount covered by Bank Guarantees of the successful tenderer and the Retention Money retained by the Client will be forfeited if the Contractor fails to comply with any of the condition of the Contract.
- 31. The successful tenderer / Contractor shall mobilize all men and materials required to adhere to the time schedule of various activities and events as per Bar Chart / PERT Chart well in advance.
- 32. For payment terms refer tender form
- 33. Performance Bank Guarantee: PBG for 5% of total contract value to be submitted separately valid from the date of WO for a period of 6 months plus 3 months claim period or till completion of the work whichever is later as per the format. PBG shall be submitted along with advance Bank guarantee.
- 34. The Contractor shall draw a detailed schedule of programme in the form of PERT CHART of the whole work, within a week of the award of work and submit to the Client for his approval.
- 35. It will be contractor's responsibility to engage a suitable associate to complete the work in all respects.
- 36. The detailed tender drawings (approx. 19 numbers of A2 & 16 numbers of A3 sheets in soft copy as) have been include in the tender for the general guidance of the contractor for the purpose of quoting, for basic and detailed reference, for evaluation to arrive at an amount and for the execution of the works. Finer detailed drawings will be furnished by the Architects during execution and the same shall be carried out by the contractor.
- 37. Tenderer shall furnish the following along with the tender.
 - 1. Schedule of Site Management staff
 - 2. Schedule of Tools & Plants and machinery deployment proposed to be handled during execution
 - 3. Methodology and Quality Control
- 38. Insufficient information or non-furnishing of details that have been asked for, will be grounds for disqualification.

I / We hereby declare that I/We have read and understood the above instructions for the guidance of tenderers.

| Place: | |
|--------|--|
| Date: | |

Signature of Tenderer

CONDITION OF CONTRACT (DEFINITIONS AND INTERPRETATION)

1. Interpretation clause:

In construing these Conditions, the Technical Specifications, Schedule of Quantities and Contract Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires.

(a) "Client"/ shall mean M/s. Sriram Educational Trust, Chennai.

| (b) | "Contractor" shall mean | in the case of |
|-----|--|----------------------------|
| | | a partnership |
| | | trading as |
| | partners in the name and style of | and having a |
| | place of business at | and shall include |
| | the partners for the time being of the said firm and the legal repres partner. | entatives of a deceased |
| | In the case of "Contractor" mean Shri | Individual trading |
| | in the name and style of and | d shall include his heirs, |
| | successors and legal representatives. | |
| | In the case of "Contractor" shall mean | Company |
| | a | company incorporated |
| | under And having | its registered office at |

assigns.

2. Definitions:

The contract document consists of the Agreement, General Instructions, Notice Inviting Tender, General Conditions of the Contract, Special Conditions Technical Specifications and Schedule of quantities, suggested bar chart, tender drawings including all modifications thereof incorporated in the document before the execution and the Contract Drawings prepared by the Architect from time to time. These form the contract.

| The Client | : M/s. Sriram Educational Trust, Chennai |
|----------------|--|
| The Architect | : M/s. AAD Architects |
| The Consultant | : Client Authorised Representative |

:

The Contractor

All those mentioned as such in the Agreement and shall include their legal representatives, assigns, or successors. They are treated throughout the Contract Document as if each were of the singular number and masculine gender.

"The Site" shall mean the site of the contract work including any building and erections thereon and any other land allotted by the Client for Contractor's use.

Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an office of the corporation for whom it is intended or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

The term "Work" of the Contractor includes labour or material or both.

All time limits stated in the contract document are of the essence of the contract.

and shall include its successors and permitted

The law of the place of work shall govern the construction under this contract.

The date of virtual completion of the work or specified portion of the work is the date when execution is sufficiently completed, in accordance with the Contract Documents as modified by any change or variation orders agreed to by the parties, so that the Client can take over project for the use it was intended.

The words 'Bidder' / 'Tenderer' shall mean the specialised construction agency / agencies who tender for the work.

3. Contract Document:

The following documents shall constitute the contract document.

- a. Tender Notice
- b. Tender Form
- c. Articles of Agreement
- d. General Instructions & Notice Inviting Tender
- e. Conditions of Contract
- f. Special Conditions / Instructions
- g. Technical Specifications
- h. Schedule of Quantities.
- i. Tender drawings duly signed by the tenderer.
- j. Suggested Bar Chart accepted by the Bidder or Bidder's alternate / detailed bar chart accepted by the Client.
- k. Letters and documents including the covering letter of the tenderer, minutes of meeting, if any, post tender and the letter of acceptance by M/s. Sriram Educational Trust, Chennai and award letter by the Client.
- I. Safety Manual

The Contract Document is complementary. What is called for in any one shall be as binding as if called for by all.

The Contract Document shall remain in the custody of the Client, so as to be available at all reasonable times for the inspection of the Contractor. Immediately after the execution of the contract one copy of the Contract Document and two copies of the Contract Drawings shall without charge be supplied by the Client to the Contractor and one copy of the Contract Document to the Consultant.

So soon as is possible after the execution of this contract two copies of the Specifications, descriptive schedule or other like document necessary for use in carrying the work shall without charge be supplied by the Client to the Contractor.

Provided that nothing contained in the said Specifications, Descriptive schedule or other document shall impose any obligation beyond those imposed by the Contract Document namely by the Contract Drawing, the Contract Bills, the Articles of Agreement and these conditions and General Instructions and Notice Inviting Tender.

It is however not the intent to specify completely herein all details of design and system. However, work shall conform in all respects, to high standards of Design and workmanship and be capable of performing in continuous commercial operation up to Tenderer's guarantee in a manner acceptable to the Client who will interpret the meaning of the drawings and specifications and shall have the power to reject any work or materials, which, in his judgement, are not in full accordance therewith.

The extent of supply under this contract includes all items shown in the tender drawings notwithstanding the fact that such items may have been omitted from the specification or schedules. Similarly, the extent of supply includes all items included in the specification or schedules notwithstanding the fact that such items may not have been shown in the tender drawings. Also such of those items not specifically included in the specifications and drawings, but which are required to complete the intent of the contract shall be deemed to be within the scope for supply by the Contractor.

The Contractor shall keep one copy of the Specifications, Descriptive schedule or other like document referred to in this clause and one copy of the Contract Drawing and such other drawings and details supplied to him from time to time and referred to in this clause and written instructions referred to in clauses 10, 17 and 31 upon the site so as to be available to the Consultant or his representative at all reasonable times.

None of the documents here-in-before mentioned shall be used by the Contractor for any purpose other than this contract and neither the Client nor the Consultant shall divulge or use except for the purpose of this contract any of the prices in the contract bills.

4. <u>Type of Contract:</u>

The Contract shall be for the items covered in the Schedule of Quantities referred as "Price Bid" of Tender document. The Contractor shall be paid for the actual quantity of work done, as measured at site, at the accepted rates as quoted by him in the Contract Bills or as modified and agreed thereupon before acceptance.

The Contract is for complete Supply, erection, and maintenance during Defects Liability Period of one year from the date of handing over of the entire scope of the specialised works.

The scope of work for each item in the Schedule of Quantities is all inclusive for proper installation of the respective items and shall include supportive items as required whether specifically mentioned or not.

The Schedule of Quantities shall be read together with technical specifications and drawings as well as special conditions of contract.

Any variation either addition or deletion in any of the items required by the **Client (SRET)** during execution of work will be based on the unit rates quoted.

5. Schedule of Quantities:

The schedule of Quantities given in Contract Bill is provisional and is meant to indicate the intent of the work and to provide a uniform basis for tendering. The Client reserves the right to increase or decrease any of the quantities or to totally omit any item of work and the Contractor shall not claim any extras or damages on these grounds.

Any error in description or in quantity or omission of items from the Contract Bill shall not vitiate this Contract but shall be treated as a variation.

6. Contract Drawings:

In general the Drawings shall indicate dimensions, position and type of construction; the Specifications shall indicate the qualities and the methods; and the Schedule of Quantities shall indicate the quantum and the rate for each item of work. Any work indicated on the Drawings and not mentioned in the Specifications or vice versa shall be furnished as though fully set forth in both. The same interpretation shall apply between Schedule of Quantities and Drawings. Work not specifically detailed, called for, marked or specified shall be the same as similar parts that are detailed, marked or specified.

The Contractor's work shall not deviate from the Drawings and the Specifications. The Client /Consultant's interpretation of these documents shall be final.

Errors or inconsistencies discovered in the Drawings and Specifications shall be promptly brought to the attention of the Consultant, through the Engineer-in-charge, for interpretation or correction. Local conditions, which may affect the work, shall likewise be brought to the Consultant's attention. If at any time, it is discovered that work is being done which is not in accordance with the Contract Drawings and Specifications, the Contractor shall correct the work immediately. Corrections of defective work shall not be a basis for any claim for extension of time. The Contractor shall not carry on work except with the knowledge of the Engineer-in-charge.

Figured dimensions on the Scale Drawings and large size details shall govern. Large size details shall take precedence over small scale drawings. Any work done before receipt of such details, if not in accordance with the same, shall be removed and replaced or adjusted, as directed by the Consultant without expense to the Client. The general conditions apply with equal force to all the work including authorized extra works.

All drawings, Schedule of Quantities and Specifications and copies thereof furnished by the Architect are his property. They shall not be used on any other work and shall be returned to the Architect at his request on completion or termination of the Contract.

7. <u>Contract Sum;</u>

The Contract sum shall not be adjusted or altered in any way whatsoever otherwise than in accordance with the express provisions of these conditions, and subject to clause 5 of these conditions any error whether of Arithmetic or otherwise in the computation of the Contract Sum shall be deemed to have been accepted by the parties hereto.

8. Contract Bills:

The quality and quantity of the work included in the contract sum shall be deemed to be that which is set out in the Contract Bills which Bills unless otherwise expressly stated in respect of any specified item shall be deemed to have been prepared in accordance with the principles of the standard method of measurement of building works last before issued by the Bureau of Indian Standards but save as aforesaid nothing contained in the Contract Bills shall override, modify or affect in any way whatsoever the application or interpretation of that which is contained in these conditions.

Any error in description or in quantity or omission of items from the Contract Bills shall not vitiate this Contract but shall be corrected and deemed to be a variation required by the Consultant.

9. Scope and Intent:

Scope:

The general character and the scope of the work is illustrated and defined by the Specifications and the Schedule of Quantities herewith attached and by the signed Drawings. If the Contractor shall find any discrepancy in or divergence between the Contract Drawings and/or the Contract Bills he shall immediately give to the Consultant/Client a written notice specifying the discrepancy or divergence and the Consultant shall issue instructions in regard thereto.

Extent:

The Contractor shall carry out and complete the work in every respect in accordance with this Contract and with the directions of and to the reasonable satisfaction of the Consultant/Client. The Architect may in his absolute discretion and from time to time issue further drawings, details and/or written instructions, written directions and written explanations all of which are collectively referred to as Architect's instructions. All such Drawings and instructions shall be consistent with Contract Document, true developments thereof and reasonably inferable therefrom.

Intent:

The intention of the Document is to include all labour and materials, equipment and transportation necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the Contract Document, true developments thereof and reasonably inferable therefrom as made clear in clause (3) above. Materials of work described in words, which so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standard.

10. Client Instructions:

The Contractor shall forthwith comply with and duly execute any works comprised in such instructions issued to him by the Client/Consultant in regard to any matter in respect of which the consultant is expressly empowered by these conditions to issue instructions provided always that verbal instructions, directions and explanations given to the Contractor or his work representative by the Consultant shall if involving a variation be confirmed in writing.

If within seven days after receipt of a written notice from the Consultant, requiring compliance with an instruction the Contractor does not comply therewith, the Client may employ and pay other persons to execute any work whatsoever which may be necessary to give effect to such instructions and all cost incurred with such employment shall be recoverable from the Contractor by the Client as a debt or may be deducted by him from any monies due or to become due to the Contractor under this Contract.

Upon receipt of what purports to be instructions issued to him by the Client/Consultant, the Contractor may request the Client/Consultant to specify in writing the provision of these conditions which empowers the issue of the said instruction. The Client/Consultant shall forthwith comply with any such request, and if the Contractor shall thereafter comply with the said instruction, then the issue of the same shall be deemed for all purposes of this Contract to have been empowered by the provision of these Conditions specified by the Client/Consultant in answer to the Contractor's request.

All instructions issued by the Client/Consultant shall be in writing. Any instruction issued orally shall be of immediate effect, but shall be confirmed in writing by the Contractor to the Client/Consultant within seven days, and if not dissented from in writing by the Client/Consultant to the Contractor within seven days from receipt of the Contractor's confirmation shall take effect as from the expiration of the latter said seven days.

Provided always, that if the Client/Consultant within seven days of giving such an oral instruction shall 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 the Client/Consultant confirmation and

Provided always that if neither the Contractor nor the Client/Consultant shall confirm such an oral instruction in the manner and at the time aforesaid but the Contractor shall nevertheless comply with the same, then the Client/Consultant may confirm the same in writing at any time prior to the issue of the Final Certificate, and the said instruction shall thereupon be deemed to have taken effect on the

date on which it was issued.

11. Co-operation:

In the case of works indicated on the Drawings but not included in the contract the Contractor shall extend co-operation for any Sub-Contractor or supplier who may be approved by the Client. The Contractor shall do the needful that may be required to make its several parts come together properly and fit to receive or be received by work of other Contractors shown upon or reasonably implied by the Drawings and Specifications for the project.

The Contractor shall not endanger any work by cutting, dismantling or otherwise altering the work and shall not cut or alter the work of any other Contractor save with the consent of the Consultant / Client.

12. Setting out:

The Architect shall determine any lines levels which may be required for the execution of the work and shall furnish to the Contractor by way of accurately dimensioned drawings such information as shall enable the Contractor to start with the Work.

The Contractor shall execute the work and shall be responsible for the accuracy of the same. He shall provide all the instruments and attendance required by the Consultant/Client for checking the work. He shall entirely at his own cost amend to the satisfaction of the Consultant/Client any error found at any stage which may arise through inaccurate execution.

13. Place of work:

Visit: Before tendering, the Contractor shall have visited and examined the place of work and satisfied himself as to the communication facilities and correct dimensions of the work and the facilities for obtaining any special articles called for in the Contract Document and shall have obtained generally his own information on all matters affecting execution of the work(s).

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. Should the Contractor after visiting the place of work, find any discrepancies, omissions, ambiguities or conflicts in or among the Contract Document, or be in doubt as to their meaning, he shall bring the questions to the Consultant's Client's attention, not later than five days before the last date for submission of the tender.

Possession:

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

14. Samples and Shop Drawings:

After the award of the Contract, the Contractor shall furnish for the approval of the Client/Consultant, with such promptness as to cause no delay in his work or in that of any other Sub-Contractor, samples and shop drawings required by the specifications or by the consultant. Samples shall be delivered as directed by the Client/Architect.

A schedule giving dates for the submission of samples shall be included in the schedule described under clause 15. Unless specifically authorised all samples must be submitted for approval within seven days of signing the Contract and not less than fifteen days before the date the particular work involved is scheduled to begin.

The Client/Consultant shall check and approve such samples, with reasonable promptness only for conformity with the design concept of the project and for compliance with the information in the Contract Documents. The Work shall be in accordance with the approved samples.

15. **Progress chart:**

The Contractor shall prepare programme charts in the form of PERT CHART and submit the same for approval of the Consultant/Client and for his record within a week of the Award of the Contract. The charts shall indicate the expected date of commencement and completion of each of the items / stage of the work and shall be in a form approved by the Consultant/Client. The chart shall also indicate the scheduling of samples, Shop Drawings and approvals.

16. Access for Consultant/Client/Architect to the Works:

The Client / Consultant and his / their authorised representatives / Architect shall at all reasonable times have access to the Works and other places of the Contractor where work is being prepared for the Contract as defined in clause 28 of these Conditions) the Contractor shall have a term in the so as to secure a similar right of access to those places for the Architect and his representatives and shall do all things reasonably necessary to make such right effective.

17. <u>Architects Status:</u>

The Architect may visit the site to familiarise himself generally with the progress of the work and to determine in general if the work is proceeding in accordance with the design. During such visits and on the basis of his observations while at the site he shall keep the Client informed of the progress of the work, shall endeavour to guard the Client against defects and deficiencies in the work of the Contractor.

Decision of Client:

The SRET shall within a reasonable time make decisions on all claims of the Contractor and all other matters relating to the execution and progress of the work or the interpretation of the Contract Document.

Dismissal:

The Contractor shall on the request of the Client/Consultant immediately dismiss from the works any person employed thereon by him who may in the opinion of the Client/consultant be incompetent or misconducts himself and such person shall not be again employed on the work without the permission of the Client/Consultant.

18. Performance Bank Guarantee Bond:

The Contractor shall deposit with the Bank Guarantee for a sum equal to that referred to in clause no. 14 of Tender Information as <u>"Performance Bank Guarantee Bond"</u>

The **<u>Performance Bank Guarantee Bond</u>** shall be in the form of Bank Guarantee as approved format enclosed to the tender shall remain so deposited with the Client as per the clause no. 14

The Performance Bank Guarantee shall indemnify the Client against loss from defects arising from any cause under this Contract or due to the failure of the Contractor to promptly carry out any matters arising under this Contract.

19. Clerk of Works or Engineer-in-charge:

The term "Clerk of Works or Engineer-in-charge" shall mean the person approved by the Consultant and appointed and paid by the Client and acting under the orders of the Consultant to inspect the works in the absence of the Client; the Contractor shall afford the Clerk of Works or Engineer-in-Charge every facility and assistance for inspecting the works and materials and for checking and measuring time and materials. Neither the Clerk of Works or Engineer-in-Charge nor any representative of the Consultant/Client shall have power to set out works or to revoke, alter, enlarge or relax any requirements of the Contract or to sanction any day work, additions, alterations, deviations or omissions, or any extra work whatever except in so far as such authority may be specially conferred by a written order of the Client.

The Clerk of Works or Engineer-in-Charge or any representative of the Client, shall have power to give notice to the Contractor or to his representative of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of Consultant/Client, is obtained. The works will from time to time be examined by the Consultant/Client, the Clerk of Works or the Client's representative but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at any stage of the works or after the same is completed. Subject to the limitation of this clause the Contractor shall take instructions only from the Client.

20. Contractors field organisation and Equipment:

Project Engineer:

The Contractor shall constantly keep on his work during its progress one or more qualified and competent Civil Engineer who will be responsible for the carrying out of the works to the true meaning of the Drawings, Specifications and Schedule of the Quantities, Clients/Consultants instructions and directions to the satisfaction of the Clients/Consultants. Any directions or instructions given to him by the Client/Consultant shall be deemed to have been issued to the Contractor. Attention is called to the importance of requesting instructions from the Client/Consultant before undertaking any work where Client's/Consultant's directions or instructions are required. Any such work done in advance of such instructions will be liable to be removed.

Arrangement of Execution of work:

The Contractor shall arrange for all materials and labour necessary including its transportation for proper execution and completion of the work to the satisfaction of the Consultant/Client.

House Keeping:

The Contractor shall be required to maintain the site and surroundings in a neat and orderly manner, free of accumulating debris, haphazard stacking of materials, unhygienic and unsafe environment, cleaning of the site at all levels inside and outside, removal of unwanted materials, packing cases etc., shall be undertaken once on daily basis. The Contractor shall comply with all applicable **environmental laws and regulations** and shall ensure that the site free from pollutants till the end of the project

Labour sanitation:

Mobile / Portable toilet cubicles shall be installed at site near the work place clearly identifying gents and Ladies. The toilets shall be cleaned on daily basis and collection shall be disposed of the site. Construction of toilets and soak pits are not allowed at site.

21. <u>Safety Code and Safety Rules:</u>

The contractor shall be obligated to make available one professional for safety at work **(Safety Steward)** on this job.

22. Payment to Local Bodies:

All payments to **statutory towards ESI, PF, WCP** etc., and for adhering to **Contract Labour Laws** shall be borne by the Contractor within **his quoted rates**.

23. Statutory obligations, notices, fees and charges:

The Contractor shall comply with and give all notices required by any Government authority, and instrument, rule or order made under any Act of Parliament or State Legislature or any regulation or Bye-law of any local authority relating to the work or with whose system the same is or will be connected. The Contractor before making any variation from the Contract Drawings or Contract Bills necessitated by such compliance shall give to the Client a written notice specifying and giving reasons for such variations and the Client may issue instructions in regard thereto. If within 10 days of having given the said written notice the Contractor does not receive any instructions in regard to the matters therein specified, he shall proceed with the work confirming to the Act of Parliament, or State Legislature instrument, rule, order, regulations or Bye-law in question and any variation thereby necessitated shall be deemed to be a variation required by the Client.

The Contractor shall pay and indemnify the Client against liability in respect of any fees or charges (including any rates and taxes) legally demandable under any Act of Parliament, or State Legislature instrument, rule or order or any regulation or Bye-law or any local authority in respect of the Work.

24. Royalties and patent rights:

All royalties or other sums payable in respect of the supply and use in carrying out the Work as desired by or referred to in the Contract Bills of any patented articles, process or inventions shall be deemed to have been included in the Contract sum, and the Contractor shall indemnify the Client from and against all claims, proceedings, damages, costs and expenses which may be brought or made against the Client or to which he may be put by reason of the Contractor infringing or being held to have infringed any patent rights in relation to any such articles, processes and inventions.

25. Licences and Permits for Materials under Government control:

Licenses and Permits for all materials under Government control shall be obtained by the Contractor through the collaboration and help of the Client. The Contractor shall include in his tender all transport charges and other expenses like transit insurance etc., likely to be incurred to bring the materials / equipment to the Site in good and sound condition.

26. Boreholes and Exploratory Excavation.

If, at any time during the execution of the works, it becomes necessary for the CONTRACTOR to make Boreholes or to carryout exploratory excavation, such requirement shall be ordered in writing. The proper safety arrangements such as barricade to be taken care to avoid any falling of children into the borehole.

27. Assignment or giving on sub-contract:

The Contractor shall not without the written consent of the Client assign the whole or any part of the Contract, and shall not without the written consent of the Client (which consent shall not be unreasonably withheld to the prejudice of the Contractor) be given on sub-contract any portion of the work.

28. <u>Sub-Contractor:</u>

- a. Any other specialised work identified by the Client / Consultant during the execution of work that may arise shall be got executed by other agency(s) engaged by the Contractor(s) on approval of the Client after adopting the procedures given below.
- b. Names of at least three and up to a maximum of five specialised sub-agencies for specified work shall be proposed along with the details of scope, experience, financial standing etc. The Client / Consultant will have the right to call for additional information as may be required to assess the capability of Sub Contractor(s) or even to inspect their previous works for fully satisfying themselves on the performance of the Sub Contractors. The Client, thereafter will convey their approval to the Contractor for selection of Sub Contractor, minimum being one number per trade or in the event of a special need for engaging more than one such specialist, up to a maximum of three in each trade. The Contractor shall engage only such approved Sub Contractor. If Client / Consultant is not satisfied with the capacity and experience of the Sub Contractor proposed by the Contractor the Client/Consultant shall have the right to nominate an agency / agencies of their choice whom the Contractor shall be bound to engage forthwith. The decision of the Client / Consultant in identifying and selection of Sub Contractor shall be final and binding on the Contractor. If during execution, the performance of any such Sub Contractor is found to be unsatisfactory, the Client shall reserve the right to order termination of such Sub Contractor and nominate alternative agency to continue the works. The Contractor shall comply with such instructions promptly and effectively.
- c. All the terms and conditions under this Contract shall be equally enforceable on the Sub Contractor for the trade and accordingly the Contractor shall have a tie up with the Sub-Contractor.
- d. The Contractor and the Sub Contractor shall further be governed as under:
- e. That the Contractor shall get the sub-contract works carried out and completed in every respect to the reasonable satisfaction of the Client and of the Consultant and in conformity with all the reasonable directions and requirements of the Client.
- f. That the Sub-Contractor shall observe, perform and comply with all the provisions of this Contract of the Contractor to be observed, performed and complied with (other than clause 48 of these conditions, if applicable) so far as they relate and apply to the Sub-Contract works or to any portion of the same.
- g. That the Sub-Contractor shall indemnify the Contractor against the same liabilities in respect of the Sub-Contractor work as those for which the Contractor is liable to indemnify the Client under this Contract and the Client will not be liable for any claims made by the Sub-Contractors against the Contractor.
- h. That the Sub-Contractor shall indemnify the Contractor against claims in respect of any negligence, omission or default of such Sub-Contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, and shall insure himself against any such claims and produce the policy, or policies and premium and premium receipts as and when required by the Contractor or Consultant.
- i. That payments in respect of any work, materials or goods comprised in the Sub Contract shall be made within fourteen days after receipt by the Contractor of the Consultant's certificate under clause 32 of these conditions which states as due an amount calculated by including the total value of such work, materials or goods, and shall when due be subject to sums mentioned in the following sub-paragraphs.
- j. That the Consultant/Client and his representative shall have right of access to the workshops and other places of the Sub-Contractor as mentioned in clause 16 of these conditions.
- k. That the Sub-Contract work shall be completed within the period or (where they are to be completed in sections) periods therein specified, that the Contractor shall not without the written consent of the Consultant grant any extension of time for the completion of Sub- Contract work or any section thereof, and that the Contractor shall inform the Consultant of any representations

made by the Sub- Contractor as to the cause of any delays in the progress of completion of the Sub-Contract work or of any section thereof.

- I. That if the Sub-Contractor shall fail to complete the Sub-Contract work or (where the Sub-Contract works are to be completed in sections) any section thereof within the period therein specified or within any extended time granted by the Contractor with the written consent of the Consultant, and the Consultant certifies in writing to the Contractor that the same ought reasonably so to have been completed by the Sub-Contractor shall pay or allow to the Contractor either a sum calculated at the rate therein agreed as Liquidated and Ascertained Damages for the period during which the said work or any section thereof, as the case may be, shall so remain or have remained incomplete or (where no such rate is therein agreed) a sum equivalent to any loss or damage suffered or incurred by the Contractor and caused by the failure of the Sub-Contractor as aforesaid.
- m. That the Contractor shall retain from the sum directed by the Consultant having been included in the calculation of the amount stated as due in any certificate issued under clause 32 of these conditions in respect of the total value of work, materials or goods executed or supplied by the Sub-Contractor the percentage of such value named in the appendix to these conditions as percentage of certified value retained up to a total amount not exceeding a sum which bears the same ratio to the Sub-Contract price as the unreduced sum named in the appendix to these conditions as limited of Retention Fund bears to the Contract sum; and that the Contractor's interest in any sums so retained (by whomsoever held) shall be fiduciary as trustee for the Sub-Contractor (but without obligation to invest); and that the Sub-Contract to deduct from such sums shall be subject only to the right of the Contractor; and that if and when such sums or any part thereof are released to the Sub-Contractor they shall be paid in full if paid within 14 days of the date fixed for their release in the Sub-Contract.
- n. Before issuing any certificate under clause 32 of these conditions the Consultant may request the Contractor to furnish to him reasonable proof that all amounts included in the calculation of the amount stated as due on previous certificates in respect of the total value of work materials or goods executed or supplied by any Sub-Contractor have been duly discharged and if the Contractor fails to comply with any such request the Consultant shall issue a certificate to that effect and thereupon the Client may himself pay such amounts to any Sub-Contractor concerned and deduct the same from any sums due or to become due to the Contractor.
- o. The Contractor shall not grant to any Sub-Contractor any extension of the period within which the Sub-Contract work or (where the Sub-Contract works are to be completed in sections) any section thereof is to be completed without the written consent of the Consultant. Provided always that the Contractor shall inform the Consultant of any representation made by the Sub-Contract work or any section thereof and that the consent of the Consultant shall not be unreasonably with-held.
- p. If any Sub-Contractor fails to complete the Sub-Contract work or (where the Sub-Contract works are to be completed in sections) any section thereof within the period specified in the Sub-Contract or within the extended time granted by the Contractor with the written consent of the Consultant then if the same ought reasonably so to have been completed the Consultant shall certify in writing accordingly. Any such certificates shall be issued to the Contractor and immediately upon issue the Consultant shall send a duplicate copy thereof to the Sub-Contractor.
- q. If the Consultant desires to secure final payment to any Sub-Contractor before final payment is due to the Contractor and if such Sub-Contractor has satisfactorily indemnified the Contractor against any latent defects then the Consultant may include an amount to cover the said final payment and thereupon the Contractor shall pay such Sub-Contractor the amount so certified. Upon such final payment the amount named in the appendix to these conditions as limit of retention fund shall be reduced by the sum which bears the same ratio to the said amount as does such Sub-Contract's price to the Contract Sum, and save for latent defects the Contractor shall be discharged from all liability for the work materials or goods executed or supplied by such Sub-Contractor under the Sub-Contract to which the payment relates.

- r. Neither the existence nor the exercise of the foregoing powers nor anything else contained in these conditions shall render the Client in any way liable to any Sub-Contractor.
- s. It shall be a condition of any tender accepted under this paragraph that clause 31 of these conditions shall apply in respect of the Item Work included in the tender as if for the reference therein to the Contract Drawings and the Contract Bills there were references to the equivalent documents included or referred in the Tender.
- t. The Contractor shall make general attendance upon Sub-Contractors including free use of plant scaffolding and shall allow them the use of sanitary conveniences, storage facilities for storing materials, other amenities available at site of work and affording them all reasonable facilities for carrying out their Contracts.

29. Artists and tradesmen:

The Contractor shall permit the execution of work not forming part of this Contract by artists, tradesmen or others engaged by the Client. Every such person shall for the purposes of clause 47 of these conditions be deemed to be a person for whom the Client is responsible and not be a Sub-Contractor.

30. Separate contracts:

The Client reserves the right to let other Contracts in connection with the work under similar general conditions. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs. If any part of Contractor's work depends for proper execution or results upon the work of any other Contractor, or Sub-Contractor, the Contractor shall inspect and promptly report to the Consultant any defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other Contractor's or Sub-Contractor's work after the execution of the work. To ensure the proper execution of his subsequent work the Contractor shall measure work already in place and shall at once report to the Consultant any discrepancy between the executed work and the Drawings.

31. Variations:

The Consultant may issue instructions requiring a variation and sanction in writing any variation made by the Contractor otherwise than pursuant to an instruction of the Consultant. No variation required by the Consultant or subsequently sanctioned by him shall vitiate this contract.

The term "Variation" as used in these conditions means the alteration or modification of the design, quality or quantity of the work as shown upon the Contract Drawings and desired by or referred to in the Contract Bills, and includes the addition, omission or substitution of any work, the alteration of the kind of standard of any of the materials or goods to be used in the work, and the removal from the site of any works materials or goods executed or brought thereon by the Contractor for the purposes of the work other than work, materials or goods which are not in accordance with this Contract.

The price in the Contract Bills shall determine the valuation of work of similar character executed under similar conditions as work priced therein.

The said prices, where work is not of a similar character or executed under similar conditions as aforesaid, shall be the basis of prices for the same so far as may be reasonable, failing which a fair valuation thereof shall be made.

Where work cannot properly be measured and valued the Contractor shall be allowed day-work rates on the prices prevailing when such work is carried out (unless otherwise provided in the contract bills):

(i). At the rates if any, inserted by the Contractor in the Contract Bills or in the form of Tender or

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(ii). When no such rates have been inserted, at the rates prevailing in the market for material and labour and at the control rates for the controlled materials including in all cases the rate for delivery of the material at the work.

Over and above the rate so worked out, Contractor's overheads and profits at 15% (Fifteen Per cent) present shall be added and rate finally arrived for consideration and approval of the Client.

Provided that in any case voucher specifying the time daily spent upon the work (and if required by the Consultant/Client the workmen's names) and the materials employed shall be delivered for verification to the Consultant or his authorised representative not later than the end of the week following that in which the work has been executed.

The prices in the Contract Bills shall determine the valuation of items omitted, provided that if omissions substantially vary the conditions under which any remaining items of work are carried out the prices for such remaining items shall be valued under this clause.

32. Certificate and payments:

The measurement and valuation of the work shall be completed within the period of final measurement and valuation stated in the appendix to these Conditions, and the Contractor shall be supplied with a copy of the priced bills of variation not later than the end of the said period and before the issue of the Final Certificate under this Clause of this Condition.

The certificate shall be conclusive evidence in any proceedings arising out of this Contract that the works have been properly carried out and completed in accordance with the terms of this Contract and that any necessary effect has been given to all the terms of this Contract which require an adjustment to be made to the Contract sum, except and in so far as any sum mentioned in the said certificate is erroneous by reason of:

Fraud dishonesty or fraudulent concealment relating to the works, or any part thereof, or to any matter dealt with in the said Certificate, or

Any defect (including any omission) in the works, or any part thereof which reasonable inspection or examination at any reasonable time during the carrying out of the works or before the issue of the said Certificate could not have disclosed: or

Any accidental inclusion or exclusion of any work, materials, goods or figure in any computation or any arithmetical error in any computation.

Save as aforesaid no Certificate of the Consultant shall of itself be conclusive evidence that any works materials or goods to which it relates are in accordance with this Contract.

33. Claim for Extra:

When any instruction or decision given at site involves extra work or where the Contractor may plan to claim an extra, it shall be the responsibility of the Contractor to inform the Consultant/Client of the extra amount and get written authorisation from the Consultant and or the Client before proceeding with the work involved.

Any modification carried out for expediting or simplifying work at the request of the Contractor or his representatives shall not be taken as the basis for claiming an extra. However, if such modification shall also involve an extra, the rate for such modification shall be settled in advance as per procedure in clause (31) above and written authorisation obtained by the Contractor from the Consultant before proceeding with the work involved. If no such information is given by the Contractor in writing to the Consultant such modification shall not be accepted as the basis for extra charge.

34. Deduction for uncorrected work:

If the Consultant deems it inexpedient to correct work damaged or not done in accordance with the Contract, an equitable deduction from the Contract price shall be made therefore.

35. Fluctuations:

The Contractor shall not claim any extras for fluctuation of price and the Contract Price shall not be subject to any rise upraise of prices and shall be firm throughout the tenure of the contract.

In the event of waiver of tax and import duty in respect of this project, the benefit there-of shall be passed onto the **Client / SRET**.

36. Unfixed goods and materials:

Unfixed materials and goods intended for, delivered to and placed on or adjacent to the work shall not be removed except for use upon the work unless the Consultant has consented in writing to such removal which consent shall not be unreasonably withheld. Where the value of any such materials or goods has in accordance with clause 32 of these conditions been included under the Contract for which the Contractor has received payment, such materials and goods shall become the property of the Client, but subject to clause 49 of these conditions (if applicable) the Contract shall remain responsible for loss or damage to the same.

37. Materials and Workmanship:

All materials and workmanship shall be as per the relevant code of I.S.I. Specification and of approved type and the Contractor shall immediately remove from the works any material and/or workmanship which in the opinion of the Consultant are defective or unsuitable and shall substitute proper materials and/or workmanship at his own cost. The term approval used in connection with this contract shall mean the approval of the Consultant.

The Contractor shall if required submit satisfactory evidence as to the kind and quality of material.

Where special makes or brands are called for they are mentioned as a standard. Others of equal quality may be used provided approval is first obtained in writing from the Consultant. Unless substitutions are requested no deviation from the Specification will be permitted. Failure to propose the substitution of any article within 7 days after signing of the Contract will be deemed sufficient cause for denial of the request for substitution.

The Contractor shall indicate and submit evidence in writing of those materials or articles called for in the Specifications that are not obtainable for installation in the work within the Time Limits of the Contract. Failure to indicate the above, within 7 days after the signing of the Contract, will be deemed sufficient cause for the denial of request for the extension of the Contract time.

All materials shall be delivered so as to ensure a speedy and uninterrupted progress of the work. Such material shall be stored so as to cause no obstruction and so as to prevent overloading of any portion of the structure, and the Contract shall be entirely responsible for damage or loss by weather or other cause.

Within 7 (Seven) days after signing the Contract, the Contractor shall submit for approval of the Architect/Consultant a complete list of all material he and his Sub-Contractors propose to use in the work of definite brand or make which differ in any respect from those specified; also the particular brand of any article where more than one is specified as a standard. He shall also list items not specifically mentioned in the Specifications but which are reasonably inferred and necessary for the completion of the work.

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Inspection:

All materials and workmanship shall be subject to inspection, examination, and test by the Consultant at any and all times during manufacture and/or construction. The Consultant shall have the right to reject defective material and workmanship or require its correction. Rejected workmanship shall be satisfactorily replaced with proper material without additional charge therefore and the Contractor shall promptly segregate and remove the rejected material from the Works. If the Contractor fails to proceed at once with the replacement of rejected materials and / or the correction of defective workmanship, the Client may by contract or otherwise replace such materials and/or correct such workmanship and charge the cost thereof to the Contractor or may terminate after giving reasonable notice the right of the Contractor to proceed further with the work.

The Contractor shall furnish promptly without additional charge all reasonable facilities, labour and materials necessary for the safe and convenient inspection and test that may be required by the Consultant.

38. Defects:

The Contractor shall make good at his own cost and to the satisfaction of the Consultant/, all defects, shrinkages or small faults, arising in the opinion of the Consultant from work or materials not being in accordance with the Drawings or Specifications or Schedule of Quantities or the Instructions of the Consultant, which may appear within "Defects Liability Period" referred to in the appendix.

Such defects, shrinkages shall upon directions in writing of the Consultant, and within such reasonable time as shall be specified therein be amended and made good by the Contractor, at his own cost unless the Consultant shall decide that he ought to be paid for such amending and making good and in case of default the Client may employ and pay other Contractor to amend and make good such defects, shrinkage, settlements or other faults and all damages loss and expense consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss or expense shall be recoverable from him by the Client or may be deducted by the Client upon the Consultant's certificate in writing from any amount due or may become due to the Contractor or the Client may, in lieu of such amending and making good by the Consultant as equivalent to the cost of amending such work and in the event of the Retention Amount being insufficient recover the balance from the Contractor, together with any expenses the Client may have incurred in connection therewith.

39. **Possession, completion and postponement:**

On the date for commencement stated in the appendix to these conditions possession of the site shall be given to the Contractor who shall thereupon begin the works and regularly and, diligently proceed with the same, and who shall complete the same on or before the date for Completion stated in the said appendix subject nevertheless to the provisions for extension of time contained in clause 41 of these conditions.

The Consultant may issue instructions in regard to the postponement of any work to be executed under the provisions of this Contract.

40. If at any time or times before Virtual Completion of the work the Client with the consent of the Contractor shall take possession of any part or parts of the same as may be needed by the Client on any exigencies then notwithstanding anything expressed or implied elsewhere in this Contract:

Such part or parts shall not be deemed to be Virtually Complete.

Virtual Completion of such part or parts shall be considered for the purpose of taking over only and all provisions under this contract shall be complied with till the entire work is completed and Clients Certificate issued to that effect.

41. Extension:

Upon it becoming reasonably apparent that the progress of the Works is delayed, the Contractor shall forthwith give written notice of the cause of the delay to the Consultant, and if in the opinion of the Consultant, the completion of the Work is likely to be or has been delayed beyond the date for completion stated in the appendix to these conditions or beyond any extended time previously fixed under this clause.

By force majeure or by reason of any exceptionally inclement weather. Or By reason of loss or damage occasioned by any one or more of the contingencies referred to in clause 44 of these conditions, or By reason of civil commotion, local combination of workmen strike or lockout affecting any of the trades employed upon the works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the work. Or By reason of Consultant's instructions issued under clauses 10, 32 or 39 of these Conditions. Or By reason of the Contractor not having received in due time necessary instructions, drawings, details or levels from the Consultant for which he specifically applied in writing on a date which having regard to the date for completion stated in the appendix to these conditions or to any extension of time then fixed under this clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same. Or By delay on the part of Sub-Contractors which the Contractor has taken all practicable steps to avoid or reduce, Or By delay on the part of artists, tradesmen or others engaged by the Client in executing work not forming part of this Contract.

Or

By reason of the opening up for inspection of any work covered up or of the testing of any of the work, materials or goods in accordance with clause 37 of these conditions (including making good in consequence of such opening up or testing) unless the inspection of test showed that the work materials or goods were not in accordance with this Contract. Or By reason of the Contractor's inability for reason beyond his control and which he could not reasonably have foreseen at the date of this Contract to secure such labour, goods or materials as are essential to the proper carrying out of the works.

Then the Consultant shall so soon as he is 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 works, provided always that the Contractor shall use constantly his best endeavours to prevent delay and shall do all that may reasonably be required to the satisfaction of the Consultant to proceed with the work.

42. Damages for non-completion:

If the Contractor fails to complete the works within the specified period or within any extended time fixed under clause 39 of these conditions and the Client / Consultant certifies in writing that in his opinion the same ought reasonably so to have been completed, the Contractor shall pay or allow to the Client a sum calculated at the rate stated in the appendix as agreed Liquidated Damages (not as Penalty) for the period during which the said work shall so remain or have remained incomplete, the Client may deduct such damages from any monies otherwise payable to the Contractor under this Contract. The amount of levy of liquidated damages (not as penalty) shall however be to the credit of **SRET** through the Main Contractor.

The tenderers are required to submit with the tender a preliminary Bar Chart / Pert Chart showing activities with corresponding resource allocation and time planned for various activities to achieve a co-ordinated completion as per the specified completion period taking into account all local weather, site and other prevailing conditions. The progress of work will be constantly monitored by the Client and Consultant. Time is the essence of the contract and the project is time bound.

On award of work the successful tenderer shall, in consultation with the Client and Consultant produce a detailed and final Bar Chart / Pert Chart, indicating physical progress of work on a weekly basis. Upon acceptance of the Bar Chart/ Pert Chart by the Client and Consultant, the successful tenderer

shall strive and maintain the planned progress most diligently.

If on the expiry of agreed contract period, the work remains incomplete, a liquidated damage will be imposed on the Contractor as stipulated in the first part of this condition.

43. Virtual Completion and Defects Liability Period:

When in the opinion of the Consultant the Works are practically completed, he shall forthwith issue a certificate to that effect and Virtual Completion of the Work shall be deemed for all the purpose of this Contract to have taken place on the day named in such certificate.

Any defects shrinkages or other faults which shall appear within the "Defects Liability Period" stated in the appendix to these conditions and which are due to materials and workmanship not in accordance with this Contract shall be specified by the Consultant in a Schedule of Defects which he shall deliver to the Contractor not later than 14 days after the expiration of the said Defects Liability Period and within a reasonable time after receipt of such Schedule the Defects Shrinkages and other faults therein specified shall be made good by the Contractor and (unless the Consultant shall otherwise instruct in which case the Contract Sum shall be adjusted accordingly) entirely at his own cost.

Notwithstanding clause of this Condition the Consultant may whenever he considers it necessary so to do, issue instructions requiring any defect, shrinkages or other fault which shall appear within the Defects Liability Period named in the appendix to these conditions and which is due to materials and workmanship not in accordance with this Contract to be made good and the Contractor shall within a reasonable time after receipt of such instructions comply with the same (and unless the Consultant shall otherwise instruct in which case the Contract sum shall be adjusted accordingly) entirely at his own cost, Provided that no such instruction shall be issued after 14days from the expiration of the said Defects Liability Period.

When in the opinion of the Consultant any defects shrinkages or other defaults which he may have required to be made good under this clause of this Condition shall have been made good he shall issue a certificate to that effect, and completion of making good defects shall be deemed for all the purposes of this Contract to have taken place on the day named in such certificates. In no case shall the Contractor be required to make good at his own cost any damage which may appear after Virtual Completion of the work, unless the Consultant shall certify that such damage is due to injury which took place before Virtual Completion of the Works.

44. Loss and expense caused by disturbance of regular progress of the works:

If upon written application being made to him by the Contractor the Consultant is of the opinion that the Contractor has been involved in direct loss and/or expense for which he would not be reimbursed by a payment made under any other provisions in this Contract by reason of the regular progress of the works or of any part thereof having been materially affected by:

The Contractor not having received in due time necessary instructions, Drawings details or Levels from the Consultant for which he specifically applied in writing on a date which having regard to the date for completion stated in the appendix to these Conditions was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same;

Or

The opening up for inspection of any work covered up or the testing of any work material or goods in accordance with clause 37 of these conditions (including making good in consequence of such opening up or testing), unless the inspection or test showed that the work materials or goods were not in accordance with this Contract; or Any discrepancy or divergence between the Contract Drawings and/or the Contract Bills; or Delay on the part of the Artists Tradesmen or others engaged by the Client in executing work not forming part of this Contract; or Consultant's instructions issued in regard to the postponement of any work to be executed under the provisions of this Contract; and if the written application is made within a reasonable time of it becoming apparent that the progress of the work or

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of any part thereof has been affected as aforesaid:

Then the Consultant shall ascertain the reasonableness and if so admissible, the amount of such loss and/or expense. Any amount from time to time so ascertained shall be added to the amount which would otherwise be stated as due in such certificate.

The provisions of this Condition are without prejudice to any other rights and remedies which the Contractor may possess.

45. **Payments withheld:**

The M/s. Sriram Educational Trust may withhold or on account of subsequently discovered evidence nullify the whole or a part of any certificate to such extent as may be necessary in his reasonable opinion to protect the Client from loss on account of:

Defective work not remedied.

Failure of the Contractor to make payments properly to Sub-Contractor or for materials or labour;

A reasonable doubt that the Contract can be completed for the balance then unpaid;

Damage to another Contractor;

Claims filed on reasonable evidence indicating probable filing of claims.

When the above grounds are removed payment shall be made for amounts withheld because of them.

46. INSURANCE:

- i). The Contractor shall be responsible for all injury or damage to persons, animals or things and for all damage to property which may arise from any factor omission on the part of the Contractor or any sub-Contractor or any nominated sub-Contractor or any of their employees.
- ii). The liability under this clause shall cover also, inter alia, any damage to structures, whether immediately adjacent to the works or otherwise, any damage to roads, streets, footpaths, bridges as well as damage caused to the buildings and other structures and works forming the subject matter of this contract. The Contractor shall also be responsible for any damage caused to the buildings and other structures and works forming the subject matter of this contract due to rain, wind, frost or other inclemency of weather.

The Contractor shall indemnify and keep indemnified the Client and hold him harmless in respect of all and any loss and expenses arising from any such injury or damage to persons or property as aforesaid and also against any claim made in respect of injury or damage, whether under any statute or otherwise and also in respect of any award or compensation or damage consequent upon such claim.

- iii). The Contractor shall, at his own expense, effect and maintain till the issue of the virtual completion certificate under this contract, with an insurance company approved by the Client, an All Risks Policy or Insurance including earthquake risk in the joint names of the Client and the Contractor (the name of the former being placed first in the policy) against all risk as per the standard comprehensive All Risk Policy for the amount of Contract and for the cost of material to be supplied by client and deposit such policy or policies with the Client before commencing the works.
- iv). The contractor shall reinstate all damage of every sort mentioned in this clause so as to deliver up the whole of the works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to property of third parties.
- v). The Contractor shall also indemnify and keep indemnified the Client against all claims which may be made against the Client, by any person in respect of anything which may arise in

respect of the works or in consequence thereof and shall, at his own expense, effect and maintain, until the virtual completion of the contract, with an Insurance Company approved by the Client a policy of Insurance in the joint names of the Client and the Contractor (name of the former being placed first in the policy) against such risks and deposit such policy or policies before commencement of the works. The minimum limit of the coverage under the Policy shall be Rs.5 lakhs for every accident or occurrence, there being no limit on the number of such accidents or occurrences.

- vi). The Contractor shall also indemnify the Client against all which may be upon the Client, whether under the workmen's compensation Act or any other statute in force, during the currency of this contract or at common Law in respect of any employee of the Contractor or of any Sub-Contractor and shall at his own expense effect and maintain until the Virtual completion of the contract, with an insurance Company, approved by the Client, a Policy of Insurance against such risks and deposit such policy or policies with the Client from time to time during the currency of this contract.
- vii). In default of the Contractor insuring as provided above, the Client may so insure and may deduct the premiums paid from any moneys due or which may become due to the Contractor.
- viii). The Contractor shall be responsible for any liability which may not be covered by the Insurance Policies referred to above and also for all other damages to any person, animal or defective carrying out of this contract, whatever, may be the reasons due to which the damage shall have been caused.
- ix). The Contractor shall also indemnify and keep indemnified the Client against all and any cost, charges or expenses arising out of any claim or proceedings relating to the works and also in respect of any award of damages or compensation arising therefrom.
- x). Without prejudice to the other rights of the Client against Contractor in respect of such default, the Client shall be entitled to deduct from any sums payable to the Contractor the amount of any damages, compensation costs, charges and other expenses paid by the Client and which are payable by the Contractor under this clause.
- xi). The Contractor shall, upon settlement by the Insurer of any claim made against the Insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the Insurer in respect of such damage shall be paid to the Contractor and the Contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.
- xii). The Contractors, in case of re-building or reinstatement after fire, shall be entitled to such extension of time for completion as the Consultant may deem fit, but shall, however, not be entitled to reimbursement by the Client of any shortfall or deficiency in the amount finally paid by the insurer in settlement of any claim arising as set out herein.
- xiii). Without prejudice to his liability under this clause, the Contractor shall also cause all sub-Contractors to effect, for their respective portions of the works, similar policies of insurance in accordance with the provisions of this clause and shall produce or cause to produce to the Client such policies. The Contractor shall not permit a sub-Contractor to commence work at the site unless the said insurance policies are submitted. In the event of failure of the sub-Contractor to take out such a policy of insurance before commencing the works at the site, the Contractor shall be responsible for any claim or damage attributable to the said sub-Contractor.

47. Injury to Persons and property of Client:

The Contractor shall be liable for and shall indemnify the Client against any liability, loss, claim or proceedings whatsoever arising under any statute or at common law in respect of personal injury to or the death of any person whomsoever arising out of or in the course of or caused by the carrying out of the works, unless such claim arises due to any act or neglect of the Client or of any person for whom the Client is responsible.

Except for such loss or damages as is at the risk of the Client under clause 48 of these Conditions (if applicable) the Contractor shall be liable for and shall indemnify the Client against any expense, liability, loss, claim or proceedings in respect of any injury or damage whatsoever to any property movable or immovable in so far as such injury or damage arises out of or in the course of or by reason of the carrying out of the works, and provided always that the same is due to any negligence, omission or default of the Contractor, his servants or agents or of any Sub-Contractor, his servant or agent.

48. Insurance against injury to Persons and Property:

Without Prejudice to his liability to indemnify the Client under clause 46 of these conditions, the Contractor shall maintain and shall cause any Sub-Contractor to maintain:

Such insurances as are necessary to cover the liability of the Contractor or as the case may be of such Sub-Contractor, in respect of personal injuries or deaths arising out of or in the course of or caused by the carrying out of the work; and

Such insurances as may be specifically required by the Contract Bills in respect of injury or damage to property movable or immovable arising out of or in the course of or by reason of the carrying out of the work, and caused by any negligence, omission or default of the Contractor, his servants or agents or, as the case may be of such Sub- Contractor, his servants or agents.

The Contractor shall produce or cause any Sub-Contractor to produce for inspection the relevant policy or policies of insurance together with the receipts in respect of premiums paid under such policy or policies as and when required so to do by the Consultant provided always that as and when may be reasonably required by the Consultant the production by either the Contractor or any Sub-Contractor of a current certificate of insurance from the company or firm which shall have issued the policy or policies aforesaid shall be a good discharge of the Contractor's obligation to produce or to cause the production of the policy or policies and the receipts in respect of premium paid.

The Contractor shall maintain in the joint names of the Client and Contractor such insurances as may be required in respect of any expense, liability, loss, claim or proceedings which the Client may incur or sustain by reason of injury or damage to property real or personal arising out of or in the course of or by reason of the carrying out of the work, and caused otherwise than by the negligence, omission or default of the Contractor, his servants or agents or any Sub-Contractor, his servants or agents.

Any such insurance as is referred to in the immediately preceding paragraph shall be placed with insurers to be approved by the Consultant and the Contractor shall have to deposit with him the policy or policies and the receipts in respect of premiums paid for the scrutinising of the Consultant.

Should the Contractor or any Sub-Contractor make default in insuring or in continuing to insure as provided in this clauses of this conditions the Client may himself insure against any risk with respect to which the default shall have occurred and may deduct a sum equivalent to the amount paid in respect of premiums from any monies due to or become due to the Contractor.

49. Insurance of the works against fire etc.:

The Contractor shall in the joint names of the Client and Contractor insure against loss or damage by fire, storm, tempest, lightning, flood, earthquake, aircraft or anything dropped therefrom, aerial objects, riot and civil commotion for the full value thereof all work executed and all unfixed materials and goods intends for, delivered to and placed on or adjacent to the work, but excluding temporary building plant, tools and equipment owned or hired by the Contractor or any Sub-Contractor and shall keep such work materials and goods so insured until Virtual Completion of the work. Such insurances shall be with insurers approved by the Consultant and the Contractor shall deposit with the Consultant the policy or policies and the receipts in respect of premiums paid: and should the Contractor make default in insuring or continuing to insure as aforesaid the Client may himself insure against any risk with respect of which the default shall have occurred and deduct a sum equivalent to the amount paid by him in respect of premium from any monies due to or to become due to the Contractor.

Provided always that if the Contractor shall independently of his obligations under this contract

maintain a policy of insurance which covers (inter alia) the said work, materials and goods against the aforesaid contingencies to the full value thereof then the maintenance by the Contractor of such policy shall if the Clients interest is endorsed thereon, be a discharge of the Contractor's obligation to insure in the joint names of the Client and Contractor and the production by the Contractor as and when may reasonably be required by the Consultant of a current certificate of insurance from the company or firm which shall have issued the said policy shall be a discharge of the Contractor's obligation to deposit with the Consultant a policy or policies and the receipts in respect of premiums paid.

Upon settlement of any claim under the insurances aforesaid the Contractor with due diligence shall restore work damaged, replace or repair unfixed materials or goods which have been destroyed or injured, remove or dispose of any debris and proceed with the carrying out and completion of the work. All monies received from such insurances shall be paid to the Contractor by instalments under certificates of the Consultant issued at the period in the appendix to these conditions. The Contractor shall not be entitled to payment in respect of the restoration of work damaged, the replacement and repair of any unfixed materials or goods and the removal and disposal of debris other than the monies received under the said insurances.

All work executed and all unfixed materials and goods intended for, delivered to and placed on or adjacent to the works (except temporary buildings, plant, tools and equipment owned or hired by the Contractor or any Sub-Contractor) shall be at the sole risk of the Contractor as regards loss or damage by fire, storm, tempest, lightning, flood, earthquake, aircraft or anything dropped therefrom, aerial objects riot and civil commotion. If any loss or damage affecting the work or any part thereof or any such unfixed materials or goods is occasioned by any one or more of the said contingencies then:

The occurrence of such loss or damage shall be disregarded in computing any amounts payable to the Contractor under or by virtue of this Contract.

The Contractor with due diligence shall restore work damaged, replace or repair any unfixed materials or goods which have been destroyed or injured, remove and dispose of any debris and proceed with carrying out and completion of the work. The restoration of work damaged, the replacement and repair of unfixed materials and goods and the removal and disposal of debris shall be deemed to be a variation required by the Consultant.

The existing structure together with all the contents thereof and the works and all unfixed materials and goods intended for, delivered to and placed on or adjacent to the works (except temporary buildings, plant, tools and equipment's owned or hired by the Contractor or any Sub-Contractor) shall be at the sole risk of the Client as regards loss or damage by fire, storm, tempest, lightning, flood, earthquake, aircraft or anything dropped therefrom, aerial objects, riot and civil commotion, and the Client shall maintain adequate insurance against that risk if any loss or damage affecting the work or any part thereof or any such unfixed materials or goods is occasioned by any one or more of the said contingencies then:

The occurrence of such loss or damage shall be disregarded in computing any amounts payable to the Contractor under or by virtue of this Contract.

- i). If it is just and equitable so to do the employment of the Contractor under this Contract may within 28 days of the occurrence of such loss or damage be determined at the option of either party by notice by registered post or recorded delivery from either party to the other. Within seven days of receiving such notice (but not thereafter) either party may give to the other a written request to concur in the appointment of an Arbitrator under clause 58 of these Conditions in order that it may be determined whether such determination will be just and equitable.
- ii). Upon the giving or receiving by the Client of such a notice of determination or, where a reference to Arbitration is as aforesaid upon the Arbitrator upholding the notice of determination the provisions of this Clause (except sub- paragraph) (iii) of paragraph (b) of clause 49 of these Conditions shall apply.
- iii). If no notice of determination is served as aforesaid or where reference to Arbitration is made as aforesaid, if the Arbitrator decides against the notice of determination then.

- iii).a. The Contractor with due diligence shall reinstate or make good such loss or damage and proceed with the carrying out and completion of the works.
- iii).b. The Consultant may issue instructions requiring Contractor to remove and dispose of any debris; and
- iii).c. The reinstatement and making good of such loss or damage and (when required) the removal and disposal of debris shall be deemed to be a variation required by the Consultant.

50. Determination by the Client:

Default:

If the Contractor shall make default in any one or more of the following respects, that is to say:

If he without reasonable cause wholly suspends the carrying out of the works before completion thereof, or If he fails to proceed regularly and diligently with the works, or If he refuses or persistently neglects to comply with a written notice from the Consultant requiring him to remove defective work or improper materials or goods and by such refusal or neglect the work is materially affected, or If he fails to comply with the provision of clause 27,

Then the Consultant may give him the notice by registered post or recorded delivery specifying the default, and if the Contractor either shall continue such a default for 14 days after receipt of such a notice and shall at any time thereafter repeat such a default (whether previously repeated or not), then the Client without prejudice to any other rights or remedies may within 10 days after such continuance or repetition of default by notice by registered post or recorded delivery forth with determine the employment of the Contractor under this Contract, provided that such notice shall not be given unreasonably or vexatiously.

Bankruptcy of Contractor:

In the event of the Contractor becoming bankrupt or making a composition or arrangement with his creditors or being a company having a winding up order made or (except for purposes of reconstruction) a resolution for voluntary winding up passed or a receiver or manager of his business or undertaking duly appointed or possession taken by or on behalf of the holders of any debentures secured by a floating charge, of any property comprised in or subject to the floating charge, the employment of the Contractor under this Contact shall be forthwith automatically determined but the said employment may be reinstated and continued if the Client and the Contractor his trustee in bankruptcy, liquidator, receiver or manager as the case may be shall so agree.

The Client shall be entitled to determine the employment of the Contractor under this Contract, if the Contractor shall have offered or given or agreed to give to any person any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution of this Contract with the Client, or for showing or forbearing to show favour or disfavour to any person in relation to this Contract or any other Contract with the Client, or if the like acts shall have been done by any person employed by the Contractor or acting on his behalf (whether with or without the knowledge of the Contractor), or if in relation to this Contract or any other Contract with the Client the Client the Contractor or any person employed by him or acting on his behalf shall have committed any offence under the prevention of corruption act, or shall have given any fee or reward the receipt of which is an offence under the Local Government Act.

In the event of the employment of the Contractor being determined as aforesaid and so long as it has not been reinstated and continued, the following shall be the respective rights and duties of the Client and Contractor.

The Client may employ and pay other persons to carry out and complete the works and he or they may enter upon the Works and use all temporary buildings, plant, machinery, appliances, goods and materials intended for, delivered to and placed on or adjacent to the works and may purchase all materials and goods necessary for the carrying out the completion of the Works.

The Contractor shall if so required by the Client or Consultant within 14 days of the date of determination assign to the Client without payment the benefit of any Agreement for the supply of materials or goods and/or for the execution of any works for the purposes of this Contract but on the terms that a supplier or Sub- Contractor shall be entitled to make any reasonable objection to any further assignment thereof by the Client. In any case the Client may pay any supplier or Sub-Contractor for any materials or goods delivered or Works executed for the purpose of the Contract (whether before or after the date of determination), in so far as the price thereof has not already been paid by the Contractors as provided in clause 28 and payments made under this paragraph may be deducted from any sum due or to become due to the Contractor.

The Contractor shall as and when required in writing by the Consultant so to do (but not before) remove from the works any temporary buildings, plant, tool, equipment's, goods and materials belonging to or hired by him. If within a reasonable time after any such requirements has been made the Contractor , has not complied therewith then the Client may (but without being responsible for any loss or damage) remove and sell any such property of the Contractor , holding the proceeds less all costs incurred to the credit of the Contractor .

The Contractor shall allow or pay to the Client in the manner hereinafter appearing the amount of any direct loss and/or damage caused to the Client by the determination. Until after completion of the works under this Clause the Client shall not be bound by any provisions of this Contract to make any further payment to the Contractor, but upon such completion and the verification within a reasonable time of the accounts therefore the Consultant shall certify the amount of expense properly incurred by the Client and the amount of any direct loss and/or damage caused to the Client by the determination and if such amounts when added to the monies paid to the Contractor before the date of determination exceed the total amount which would have been payable on due completion in accordance with this Contract, the difference shall be a debt payable to the Client by the Client shall amounts, when added to the said monies be less than the said total amount, the difference shall be a debt payable by the Client to the Contractor.

51. Determination by the Contractor:

Without prejudice to any other rights and remedies which the Contractor may possess, if the Client does not pay to the Contractor the amount due on any certificate within the period for Honouring Certificates named in the appendix to these Conditions and continues such default for seven days after receipt by registered post or recorded delivery of a notice from the Contractor stating that notice of determination under this condition will be served if payment is not made within seven days from receipt thereof; Or The Client interferes with or obstructs the issue of any certificate due under this Contract; Or The carrying out of the whole or substantially the whole of the uncompleted works (other than the execution of work required under clause 43 of these conditions) is suspended for a continuous period of the length by reason of:

Force majeure [events beyond the Contractors reasonable control (excluding defaults of the Contractors, subcontractors and strikes, lock-outs or industrial disputes of the Contractor's workforce)] ("Force Majeure Event"), or Loss or damage occasioned by any one or more of the contingencies referred to in clause 48 of these conditions (if applicable) Or Civil commotion, Or Consultant's instructions issued under clauses 6, 31 or 39 of these conditions, Or The Contractor not having received in due time necessary instructions drawings, details or levels from the Consultant for which he specifically applied in writing on a date which having regard to the date of completion stated in the appendix to these Conditions Or to any extension of time when fixed under clause 41 of these Conditions was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, Or Delay on the part of Artists, Tradesmen or others engaged by the Client in executing work not forming part of this Contract, or The opening up for inspection of any work covered up or of the testing of any of the work materials or goods in accordance with clause 37 of these Conditions (including making good in consequence of such opening up or testing) unless the inspection or test showed that the work materials or goods were not in accordance with this Contract.

Then Contractor may thereupon by notice by registered post or recorded delivery to the Client or Consultant forthwith determine the employment of the Contractor under this Contract; provided to such notice shall not be given unreasonably or vexatiously.

Upon such determination, then without prejudice to the accrued rights or remedies of either party or to any liability of the classes mentioned in clause 44 of these Conditions which may accrue either before the Contractor or any Sub-Contractor shall have removed his or their temporary buildings, plant, machinery, appliances, goods or materials or by reason of his or their so removing the same, the respective rights and liabilities of the Contractor and the Client shall be as follows that is to say:

The Contractor shall with all reasonable diligence despatch in such manner and with such precautions as will prevent injury, death or damage of the classes in respect for which before the date of determination he was liable to indemnify the Client under clause 43 of these Conditions remove from site all his temporary buildings, plant, machinery, appliances, goods and materials and shall give facilities for his Sub-Contractors to do the same but subject always to the provisions of this clause.

After taking into account amounts previously paid under this Contract the Contractor shall be paid by the Client:

The total value of the works completed at the date of determination.

The total value of work begun and executed but not completed at the date of determination the value being ascertained mutatis mutandis in accordance with clause.31 of these Conditions.

The cost of materials or goods properly ordered for the works for which the Contractor shall have paid or of which the Contractor is legally bound to pay, and on such payment by the Client materials or goods so paid for shall become the property of the Client.

The reasonable cost of the removal under this clause.

Any direct loss and/or damage caused to the Contractor by the determination.

Provided that in addition to all other remedies the Contractor upon such determination may take possession of and shall have a lien upon all unfixed materials which may have become the property of the Client under clause 36 until payment of all monies due to the Contractor from the Client.

52. <u>Co-ordination of Work:</u>

At the commencement of work, and from time to time, the Contractor shall confer and with the Consultant for the purpose of the co-ordination and execution of the various phases of the work.

The Contract shall ascertain the Sub-Contractors, persons engaged on separate contracts in connection with the Works, the extent of all chasings, cuttings and forming of all openings, holes, grooves, etc. as may be required to accommodate the various services, the Contractor shall ascertain the routes of all services and the positions of all floor outlets, traps, etc. in connection with the installation of plant and services and arrange for the Construction of work accordingly.

The breaking and cutting of completed work must be avoided.

53. Labour:

The Contractor shall employ no child labour less than 18 years of age on the work. If female labour is engaged the Contractor shall make necessary provision for safeguarding small children and keeping them clear of the site of operations. No labourers shall reside within the compound except authorised guards.

54. **Protection of trees and shrubs:**

Trees and Shrubs designated by the Architect/Client shall be protected from damage during the course of the work and the earth level shall not be changed within three feet of such trees. Where necessary such trees and shrubs shall be protected by means of temporary fencing.

55. Guarantee:

Besides guarantees required elsewhere, the Contractor shall guarantee the work in general for one and a half year as noted under clause 43 of the Conditions.

All required guarantees shall be submitted to the Consultant by the Contractor when requesting certification of accounts for payment by the Client.

56. Antiquities:

All fossils and other objects of interest or value which may be found at the site or in excavating the same during the progress of the work shall become the property of the Client. The Contractor shall carefully take out and preserve all such objects and shall immediately or as soon as conveniently may be after the discovery of such articles deliver the same into the possession of the Consultant or of the Clerk- of-Works unclaimed and as excavated.

If in the opinion of the Consultant compliance with the provisions of the preceding Clause has involved the Contractor in direct loss and/or expense for which he would not be reimbursed by a payment made under any other provision in this Contract then the Consultant shall ascertain the amount of such loss and/or expense, any amount from time to time so ascertained shall be added to the Contract sum, and if is issued after the date of ascertainment any such amount which would otherwise be stated as due in such certificates.

57. Excepted matters:

The decision, opinion, direction, certificate (except for payment) with respect to all or any of the matters under clauses 6,10,17, 19, 20, 27, 28, 37, 41 and 49 hereof (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal. If any disagreement or any other decision, opinion, direction, certificate or valuation of the Consultant or any refusal of the Consultant to give any of the same shall be subject to a reference to Arbitration as covered under Indian Arbitration Act in force.

58. Disputes:

If the Contractor be dissatisfied with the decision of the Consultant on any matter, question or dispute of any kind (except any of the excepted matters) or as to the withholding by the Consultant of any certificate to which the Contractor may claim to be entitled then and in any such case either party (the Client or the Contractor) may seek settlement through Arbitration proceedings in accordance with Indian Arbitration and Conciliation Act 1996 in force. The venue of Arbitration shall be in Chennai.

The Governing Law of this Agreement and of the relations of the parties arising from it and of any arbitration pursuant to it shall be the laws of the Republic of India.

Provided always that the Client shall not withhold the payment nor the Contractor except with the consent in writing of the Client's representative/Consultant in any way delay the carrying out of the works by reason of any such matters, question or dispute being referred to Arbitration but shall proceed with the work with all due diligence and shall, until completion of Arbitration proceedings, relieve the Main Contractor of his obligations to adhere strictly to the Clients/Consultants instructions with regard to the actual carrying out of the works.

Further disagreement, if any, after the Arbitration Award may be resolved through Court of Law. All such disputes arising out of matters in connection with this agreement shall be deemed to have arisen at Chennai and only courts in Chennai shall have the jurisdiction to determine the same.

The work shall however be progressed as per time scheduled, independent of such exigencies unless the Client desires otherwise.

59. **Protection and cleaning:**

The Contractor shall protect and preserve the work from all damage or accident by providing any temporary coverings, boxing or other construction as required by the Consultant. This protection shall be provided for all property adjacent to the site as well as on the site.

The Contractor shall properly clean the work as it progresses and shall remove all rubbish and debris from the site from time to time as is necessary and as directed. On completion the Contractor shall ensure that the premises and/or site are cleaned surplus materials debris, sheds etc. removed, areas under floors cleared or rubbish gutters and drains cleared, and handed over to the clerk- of works so that the whole is left fit for immediate occupation or use and to the satisfaction of the Consultant.

CONTRACTOR shall be responsible to keep entire site free from water due to water coming from any source at any level and shall protect all materials and works from being damaged by the water from any source. CONTRACTOR shall make proper arrangements for drainage prior to use of water for curing, testing, cleaning etc. The contractor care to be taken for Vector control at site during the execution.

60. Tolerance:

Defects noticed beyond permissible tolerance shall be made good as per the instructions of the Consultant. Rectification or remaking or replacing shall be done at the risk and cost of the Contractor.

61. Recovery of money from contractor in certain cases

In every case in which provision is made for recovery of money from the contractor, SRET shall be entitled to retain or deduct the amount thereof from any money that may be due or become due to the contractor under these presents and or under any other contracts or contracts or any other account whatsoever.

62. Goods and Service Tax - GST

Applicable Goods and service tax (GST) will be paid separately. The rates quoted shall exclude the GST and the successful bidder / organisation shall provide GST registration details before issuing Letter of intent (LOI). The billing format shall be as per the prescribed format of GST.

Place :

Date

Signature of the Tenderer:

SPECIAL CONDITIONS / INSTRUCTIONS

- 1. The submission of tender shall comply with the requirements as detailed.
- 2. SRET will adopt a comprehensive methodology for evaluating the tenders received for the said works. The Tenderer who submits the lowest bid without any conditions and who conforms to the tender conditions in totality without any deviation and who accepts to complete the said works in the stipulated time will be given the highest preference, subject to there being no disproportionately high rates quoted by the lowest Tenderer for any of the items in the Schedule of quantities or in any of the quote rate items only or in the attendance charges payable to the Tenderer. Where SRET finds that the lowest Tenderer, in spite of being the lowest in the overall price bid, has quoted disproportionately high rates under any of the items listed above or otherwise, SRET will reserve the right to discuss / negotiate with the lowest Tenderer towards rationalising of the quoted rates for such items either in comparison with the estimated rates or with the rates of other Tenderers. Likewise, SRET reserves the right to discuss / negotiate with the lowest Tenderer towards achieving conformity with the tender conditions. The Tenderers should note that SRET reserves the right to reject any conditional tenders and the decision of SRET on such matters shall be binding on the Tenderers.
- 3. The tenderer shall inspect the site and obtain required details for proper execution of work successfully within the specified time limit. The responsibility for obtaining all such data / details rests with the tenderer and no claim to extra at a later date will be entertained by Client due to the failure of the tenderer to make sufficient investigation prior to tendering.
- 4. Adequacy of space within the site required for execution purposes as well as for stacking material, fabrication yard, and any other connected requirements specifically not mentioned herein or otherwise shall be taken care of by the tenderer. The tenderer should make his/their arrangements for all the above requirements including labour camp, transportation of labour, materials etc. and the cost incurred thereon should cover within the quoted rates.
- 5. The Tenderer should give the undertaking stating that they have not been blacklisted or de-registered by any central/state government department or public sector undertaking and also that none of their work was rescinded by the client after award of contract during last 10 years

The tenderer shall peruse carefully the tender notice, conditions of contract, bills of quantities, relevant drawings, outline specifications and general conditions etc., before pricing in the quantities. All these documents shall be returned with the tender duly signed on every page in token of acceptance of the conditions.

The tenderer shall quote all-inclusive rates but excluding GST. Bidders shall quote separately the component of goods and service tax for the overall cost of the project. (The component of goods and service tax should not be included in the unit rate of the items). The sum payable shall be calculated on the basis of the unit prices specified in the contract and of the work actually executed.

All other taxes and duties in force as on date have been included in your item rates/prices. We shall deduct TDS under income tax act unless you shall submit no deduction certificates from your respective tax assessing authorities.

 Tender shall include in his quoted rates Toll plaza payments, loading unloading charges, transit insurance for safety of materials / goods / equipment & machinery in transit and other similar incidentals etc. No extra payment will be entertained on account of these.

6. Shop Drawings / Co-ordination Drawings:

The Contractor shall arrange for detailed shop drawings / fabrication drawings and material specifications for specialised works and submit 5 (five) copies each of the same for Client's / Consultant's prior approval. All shop drawings shall reflect the design intent as provided in the execution drawings and shall not be deviated without prior permission. The shop drawings shall be based on the actual site conditions and shall take into account all coordination as may be required in

order to avoid any clash or interference with other service lines or any other building features. The shop drawings shall be fully supported by necessary design calculations wherever applicable or as directed by the Consultant to the Contractors. Such design calculations shall be carried out by a competent agency and shall also comply with relevant Indian / International standards as applicable. Wherever so required, the Client reserves the right to demand a certificate as to the correctness of the design to be issued after verification by an independent proof checking agency whom, the Client may either approve or nominate.

All charges for preparing the shop drawings, coordination drawings, preparation of design, getting the same proof checked including carrying out any other modifications as necessary shall be fully covered in the quoted rates and no extra shall be payable for adherence of the above requirement.

Fully detailed as complete drawings to explain the installation in totality shall be submitted within one month of completion of specialised work. Copies of each of such built in drawings shall be submitted to the Client / Consultant. After scrutiny and observations by the Client / Consultants, the drawing given shall be required to be obtained for a final amended as built drawing and the final version thereof submitted in hard copy format in triplicate as well as electronic format in AutoCAD 2010 in CD ROM.

- 7. All rules and regulations of labour department, contract labour laws, Provident Fund & ESI and connected laws, Comprehensive All risk Insurance requirements (as applicable for direct award of works) and all other laws of the land are to be complied with by the tenderer.
- 8. The following important provisions in the tender shall be noted before quoting for the work

8.a. List of approved make(s) / manufacture:

The approved makes wherever listed in the tender documents are the preferred makes, based on their performance, reputation etc. The tenderers are allowed to offer equivalent alternatives, provided the tenderers can guarantee performance equal to that of the listed products. The final choice of approving the make of any product will however rest with the Client / Architect and this decision shall be final and binding on the successful Tenderer. The Tenderers are required to indicate on a separate annexure a list of items furnishing details of the manufacturer's name, conformity to IS / International Standards etc. for each product. Even where the Tenderers intend to use the same make as per approved list, the name(s) shall be repeated in the annexure. The Tenderers are allowed to furnish names of two manufacturers for each product in the order of preference. This annexure shall be submitted along with the Bid. **SRET** shall review the list furnished by the Tenderers and if **SRET** is not satisfied with the make of the any particular item, **SRET** shall reserve the right to insist on the desired manufacture. The Tenderers shall have no choice to change the make / manufacture of any product mutually agreed upon prior to opening Bid.

- 8.b. Liquidated damages not as penalty for delayed completion as envisaged under clause of the Contract conditions elsewhere and as specified under summary of Notice Inviting Tender and Condition of Contract.
- 9. Any treasures, antiques, valuable etc. found during excavation belong to the Client and the same shall be handed over without causing any damage to them.
- 10. Schedule of quantities shall be referred in the Tender documents.
- 11. The successful tenderer / contractor shall make post execution survey and report as soon as the works are completed duly checked all the actual dimensions with that required as per drawings and specifications. Any defects noticed beyond permissible tolerances shall be made good by the Contractor as per instructions of the Consultant without any extra cost and time.

The Client's / Consultants representatives' shall conduct a joint inspection with the Contractors' authorised representative at every stage of execution of work and record any deviations or any quality defects or any such issues which require immediate attention / action from the Contractor

to make good or rectify such defects or observations jointly recorded. The same shall be done without any extra cost. Failure / delay in holding such joint inspections shall not absolve the Contractor from his responsibilities to rectify any defects which may be subsequently noticed at any time after the respective stages of work.

- 12. Site organisation programme proposed to be adopted during execution of work and quality assurance and quality control procedures shall be submitted along with the tender.
- 13. In addition to finalising all relevant technical information wherever sought for in this document, the tenderers are also required to furnish the same technical information in soft copy. The tenderers shall ensure that the information contained in the hand written format and the electronic formats are the same. No reference of rates shall be made in the information in the floppy diskette.
- Communication and Document distribution pertain to respective specialised works shall be made during execution of work to meet the requirement of SRET through the Contractor as per schedule given in Appendix – 'E'.

Place:

Date:

Signature of the Tenderer:

Appendix –'A'

Terms and conditions related to SRET:

Taxes and duties:

The tenderer shall quote all-inclusive rates but excluding GST. Bidders shall quote separately the component of goods and service tax for the overall cost of the project. (The component of goods and service tax should not be included in the unit rate of the items). There shall be no extra on any account.

We shall deduct TDS under income tax act unless you shall submit no deduction certificates from your respective tax assessing authorities.

Arbitration clause:

If either of the parties to this agreement raises any dispute on any issue relating to the terms and conditions or any matter, the party concerned may seek settlement through Arbitration proceedings in accordance with Indian Arbitration and Conciliation Act 1996 as amended. The venue of Arbitration shall be Chennai. The Arbitration proceedings shall be before a Sole Arbitrator nominated by the Client. The Governing Law of this Agreement and of the relations of the parties arising from it and of any arbitration pursuant to it shall be the laws of the Republic of India. Provided always that the Client shall not withhold the payment nor the contractor except with the consent in writing of the Consultant in any way delay the carrying out of the works by reason of any such "matters, question or dispute being referred to Arbitration proceedings, relieve the Main contractor of his" obligations to adhere strictly to the client and Consultant's instructions with regard to the actual carrying out of the works. "Further disagreement, if any, after the Arbitration Award may be" resolved through Court of Law. All such disputes arising out of matters in connection with this agreement shall be deemed to have arisen at Chennai and only courts in Chennai shall have the jurisdiction to determine the same. "The work shall however be progressed as per time scheduled, independent" of such exigencies unless the client desires otherwise.

Statutory and labour requirements:

- a. The contractor shall submit copy of attendance register and pay roll in respect of employee and worker who would be engaged by you at our site for execution of the contract on monthly basis.
- b. The contractor shall deposit for your employees and labour engaged for execution of this contract WCP, ESI and PF and deposit copies of the challan to client along with registration details.
- c. The contractor shall submit indemnity bond as per the format to client on non-judicial stamp stating there in that the contractor shall be responsible for making compliance of all statutory requirements. The contractor shall also be responsible for any kind of accidents at site during the course of execution of this order at your end either to your workmen or employees or other third party and any of the workmen engaged directly by Client or through other agencies.
- d. The contractor shall under take (CAR) contractor all risks policy/erection all risks policy and workmen compensation policy for execution of this work order. The contractor shall within 14 days from the date of commencement of the work insure the works (CAR Policy) at his cost and keep them insured until one month after the works are taken over by the Client or three months after the date of completion whichever is later.

1. WCP Insurance Policy:

The contractor shall obtain Workers compensation policy as required under the provisions of Workmen Compensation Act.

Employees State Insurance:

The contractor shall make compliance of ESI laws applicable in respect of this work order. The contractor shall submit to Client your Establishment Code no. registered with ESI Authorities. The contractor shall submit the following:

- a. Copy of attendance register duly certified by your Project in charge.
- b. Copy of Muster roll / payroll duly certified by your Project in charge giving therein the ESI code no. allotted to individual employees, amount of ESI deducted etc.
- c. Copy of ESI challan deposited with ESI Authorities.

2. <u>Provident Fund:</u>

You shall make compliance of Provident Fund laws applicable in respect of this work order. You shall submit to Client your Establishment Code no. registered with PF Authorities. You shall submit the following:

- a. Copy of attendance register duly certified by your Project in charge.
- b. Copy of Muster roll / payroll duly certified by your Project in charge giving therein the PF code no. allotted to individual employees, amount of PF deducted etc.
- c. Copy of PF challan deposited with PF Authorities

3. Labour registration in Chennai:

- a. The contractor shall obtain labour registration in Chennai to carry out work at our M/s. Sriram Educational Institutions site at Chennai.
- b. The contractor shall obtain labour license from Labour Commissioner as required for commencing the work at site.
- c. Labour Cess (1%) of contract value shall be in the scope of the contractor.

4. <u>Construction Power and water:</u>

Contractor shall make his own arrangement for power supply required for executing the project, lighting and their office including necessary backup and distribution system with adequate safety as required.

Open space will be provided for constructing the site office if required. The same shall be removed once the work is complete and the site shall be handed over in a similar condition as was before.

5. Labour Hutment and Labour sheds are not allowed at site for any kind of labour dwelling at site.

Appendix – 'B-1'

BANK GUARANTEE FORMAT – ADVANCE PAYMENT

To be executed on a non-judicial stamp paper of appropriate value

DRAFT OF THE BANK GUARANTEE TO BE EXECUTED BY TENDERER

То

M/s Sriram Educational Trust No.49, Anna Salai, Chennai – 600 002.

- 3. We ------ (Name of the bank) undertake to pay to the Client any money so demanded notwithstanding any dispute or dispute raised by the tenderer(s) in any suit or proceeding pending before any court or Tribunal relating hereto our liability under this present being absolute and unequivocal.

The Payment so made by us under this guarantee shall be a valid discharge of our liability for payment there under and the tenderer(s) shall have no claim against us for making such payment.

4. We, ------ (Name of the bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and

that it should continue to be enforceable till all the dues of the Client be under or by virtue of the said Contract have been fully paid and its claim authorities satisfied or discharged by the said tenderers.

Unless a claim or demand under this guarantee is made or presented to the Bank within six months from the expiry date of this Bank Guarantee, all the rights of the Client under this guarantee shall cease and the Bank shall be released and discharged from all liability hereunder.

5. We, ------ (Name of the bank) further agree with the Client that the Client shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance of the said tenderers from time to time to postpone for any time or from time to time of the powers exercised by the Client against the said tenderers and to forbear or enforce any of the terms and conditions relating to said Contract and we shall not be relieved from our liability by reason of any variation, or extension being granted by the said Client to the said tenderer or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision, have effect of so relieving us.

This guarantee shall not be affected by any change in the constitution of the Bank or the tenderer.

We, ----- (Name of the bank) undertake not to revoke this guarantee during its currency except with the previous consent of the Client in writing.

Notwithstanding anything contained herein:

- 2. This Bank Guarantee shall remain in force and effect for a period of from to and
- 3. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee and only if Client serve upon us a written claim or demand within six months from the expiry date of this Bank Guarantee.

Date:

Signature & Seal of Bank

(Authorized Signatory)

Appendix – 'B-2'

To be executed on a non-judicial stamp paper of appropriate value

BANK GUARANTEE FORMAT – RETENTION BANK GUARANTEE

THIS DEED OF GUARANTEE IS MADE THIS day of 20xx between M/s Sriram Educational Trust, No.49, Anna Salai, Chennai – 600 002, and having its site at M/s. Sriram Educational Institutions, No.1, Stephenson Lane, Vyasarpadi, Chennai – 600 039 hereinafter called as the "Client" (which expression shall unless excluded by or repugnant to the context include its successors and assignees) of the one part and ______ hereinafter called as the "Bank" (which expression shall unless excluded by or repugnant of the context include its successors and assignees) of the other part.

AND WHEREAS at the request of the vendor / contractor, the Bank has agreed to execute these presents.

NOW THE DEED WITNESS AND IT IS HEREBY AGREED AND DECLARED BY AND between the parties hereto as follows:

- 2. We ______ do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Client stating that the amount claimed is required to meet the recoveries due or likely to be due from the said vendor / contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and

payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.______ only).

3. We, the said Bank further undertake to pay to the Client any money so demanded notwithstanding any dispute or disputes raised by the vendor / contractor in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there-under and the vendor / contractor shall have no claim against us for making such payment.

- 4. We _______ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the dues of the Client under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Client would certify that the terms and conditions of the said contract have been fully and properly carried out by the said vendor / contractor and accordingly discharge this guarantee.
- 5. We ______ further agree with the Client that the Client shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance, Warranty / AMC maintenance / Defects Liability period by the said vendor / contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Client against the said vendor / contractor and to forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being made or for any forbearance, act of omission or any indulgency by the Client or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
- 6. This guarantee will not be discharged due to the change in the constitution of the Bank or the vendor / contractor.
- 7. We ______ undertake not to revoke this guarantee except with the previous consent of the Client in writing.
- 8. This guarantee shall be valid up to unless extended on demand by the Client. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.______ (Rupees ______ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee; all our liabilities under this guarantee shall stand discharged.

- 9. That the Bank undertakes to pay the amount as may be demanded by the Client as aforesaid within 1 (one) day of the receipt of the demand. In case the payment is not made within 1 (one) day as aforesaid, the Bank shall be liable to pay 18% interest per annum, for the delay in payment and it shall be without prejudice to the Client's right (s) for any other remedies that may be permissible under the law.
- 10. Any time concession or act of omission or indulgence granted by the Client to the vendor / contractor / Bank will not constitute waiver on the part of the Client or the same shall not be in any way prejudice or adversely affect the Guarantee.
- 11. The Guarantee shall not be prejudiced or in any case discharged or vitiated if the Client holds any other Undertaking / Indemnity or any other securities for protection of their interest.
- 12. That the Bank declares that it has power to issue this Guarantee in favour of Sriram Educational Trust, Chennai under its Memorandum and Articles of Association and the undersigned has full powers to execute it under the Power of Attorney dated______ granted to him by the Bank.
- 13. IN WITNESS WHEREOF THE parties have executed these presents the day and year mentioned above in the 1st line of this Guarantee Bond.

Signed and delivered by

Signed and delivered by

FOR AND ON BEHALF OF M/s Sriram Educational Trust

The constituted attorney for and on behalf of the Bank in the PRESENCE OF

1.....

1.....

2.....

2.....

<u>APPENDIX – 'C'</u>

SCHEDULE OF CONTRACTOR'S SITE MANAGEMENT STAFF

Tenderers must enter below the name, qualifications and experience of their key full time site personnel in the proposed site organisation.

| Name | Qualification | Position | Experience | Period when available from start of work |
|------|---------------|----------|------------|---|
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Signature of Tenderer

<u>APPENDIX – 'D'</u>

SCHEDULE OF PLANT AND EQUIPMENT PROPOSED TO HANDLE AT SITE FOR EXECUTION

The tenderer must enter below particulars of plant and equipment he proposes to use on the works.

| Description | Year of Manufacture | Capacity | Period when available from start of work | Owned or hired | On next commencement phase |
|-------------|------------------------|----------|--|-------------------|----------------------------------|
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Tenderer hereby confirm that the quantity and type of Equipment they will employ / handle for execution will not be less than those listed above and agree to bring more equipment if so, warranted in the opinion of the Consultant.

Signature of Tenderer

Seal:

APPENDIX – 'E'

METHODOLOGY AND QUALITY CONTROL

The tenderer shall submit methodology and Quality Control for the following aspects of work along with the tender. The information furnished by the tenderer shall be considered in evaluation of the tender.

- 1. Procurement
- 2. Manpower Planning
- 3. Installation
- 4. Quality Control at different stages of execution
- 5. Testing
- 6. Inspection procedure and check list
- 7. Maintenance Plan

Signature of Tenderer

Seal:

TECHNICAL SPECIFICATIONS FOR INTERIOR WORK

1. General

These specification are for work to be done, items to be supplied, materials, to be used in the work shown and defined on the drawing and described herein, to the satisfaction of the Client / Consultant

1.1 The workmanship is to be the best possible and of a high standard. The Contractor shall take all steps immediately to make deficiencies if any noticed by the Client / Consultant. Use must be made of special tradesman in all aspects of the work and allowances must be made in the rates for the same.

1.2 The materials to be provided by the contractor shall be accordance with the samples already got approved from the Client /Consultant by the contractor and in conformity with specification and approved list of manufactures and brand. The contractor shall produce all invoices, vouchers or receipts for any materials if called upon to do so by The Client /Consultant.

1.3 Samples of all materials are to be submitted to the Client /Consultant for the approval before the contractor orders or deliver the materials to the site. Samples together with their packing are to be provided free of charge by. The contractor and should any materials to be rejected, they will be removed from the site at the contractor's expenses. All samples will be retained by the Client /Consultant for comparison with materials which will be delivered at site. Also the contractor will be required to submit the specimen finishes of colours, fabrics etc., for the approval of the Client /Consultant before proceeding with the work.

1.4 The contractor shall be responsible for providing and maintaining temporary coverage required for the protection of finished work. He is also to clean out all wood shaving, cut ends and other waste from all parts of the work before covering or in filling is constructed.

1.5 Contractor shall maintain uniform quality and consistency in workmanship throughout the execution of the work.

1.6 Site order Books / reports for the purpose of quick communication between the Client /Consultant or Client's /Consultant's representative and the contractor or his agent or representative, site instruction books shall be maintained at site in the manner as described below.

1.7 Any communication, relating to the works may be conveyed through records in the site instruction book. Such communication from the Client /Consultant or Client's /Consultant's representative to the contractor shall be deemed to have been adequately served in terms of the contract. Each site instruction book shall have machine number pages in triplicate and shall be carefully maintained and preserved by the contractor at site. Any instruction or others which the Client /Consultant /his representative may like to issue to the contractor may be recorded by him in the site instruction book and one copy thereof issued to the contractor.

1.8 The contractor shall check and verify all site levels and measurements whenever requested by the other specified contractors to enable them to prepare their own shop drawings and pass on the information with sufficient promptness. A copy of all such information passed on shall be given to the consultants.

1.9 Templates, boxes and moulds shall be accurately set out rigidly constructed so as to remain accurate during the time they are in use.

1.10 All unexposed surface of timber eg: - partition/panelling frames, false ceiling, backing, fillets, backs of door frames, cupboards framing, grounds etc. are to be treated with two coats of approved timber preservative and anti-termite paints before fixing or converging.

2. Joinery in woodwork

2.1 The contact surface between internal frame and skinning shall be glued with approved adhesive in addition to fixing with necessary screws etc.

2.2 After preparing proper surface of skinning by sand preparing etc., the laminate or veneers shall be fixed on it with the help of approved adhesive.

2.3 Frame work for full height partition shall be rigidly fixed to the floor, walls and ceiling soffit.

2.4 Any portions that are warped or found with other defects are to be replaced. The whole of the work is to be framed and finished in a workman- like manner in accordance with detailed drawings and the direction of Client /Consultant and whenever required, fitted with all necessary metals ties, straps, screws, adhesive etc. Joinery work generally to be finished with fine sand/glass paper.

2.5 All joints shall be standard Mortise and Tenon, dowel, or cross-halved. Screws, nails, etc. will be of standard iron or wire. Tenon should fit the mortises exactly.

2.6 Nailed or glued butt joints will not be permitted.

2.7 Whenever screw heads are on finished surfaces those will be sunk and the hole plugged with a wood plug of the same wood and grain to match the colour.

2.8 The contact surfaces of dowels, tenons, wedges etc., shall be glued with approved adhesives. Were glued, joinery and carpentry works is likely to come into contact with moisture; the glue should be water proof.

3. <u>Timber</u>

3.1 All the Sal wood, Steam, Beach wood, CP teak, BTC to be used shall be properly seasoned, of natural growth and shall be free from worm holes, loose or dead knots or other defects, sawn square and shall not suffer from warping, spitting or other defects.

3.2 The moisture content shall not exceed 12%

3.3 All internal frameworks shall be treated with approved wood preservative and anti-termite treatment/paint.

3.4 All rejected, decayed, bad quality wood shall be immediately removed from site.

3.5 All the dimensions mentioned for wood members are finished sizes. All wood brought to site should be stacked, stored properly as per instructions.

4. <u>Plywood</u>

Plywood should be accordant as per the specification stipulated in bills of quantities. Commercial Ply wood should generally conform to IS: 303, bonded with Phenol formaldehyde, BWR grade treated with wood preservative. Particle boards should be phenol formaldehyde bonded and generally confirm to 15:3087 – 1965. Only 3mm to 4mm thick straight grain group matching approved veneers should be used. MDF if used in places as per specification should be confirming to 15:12406 - 1988

5. <u>Hardware and Metals</u>

5.1 The hardware throughout shall be of approved manufacture or supplier well-made and equal to in every respect to the sample to be deposited with Client /Consultant. The contractor may be required to produce and provide samples from many different sources before the Client /Consultant to take decisions and he should allow his rates for doing so.

5.2 All the screw/bolts with nuts to be used shall have oxidized finish (unless required otherwise) of

approved shapes, size and quality.

5.3 Fittings shall be of brass oxidized heavy duty unless specified otherwise.

5.4 Samples of all hardware are required to be got approved in advance from Client/Consultants.

5.5 The agency should cover up and protect the brass surface by thick grease or other suitable material veneer as necessary and subsequently clean it away at the same time of handing over.

5.6 All hardware shall be fitted with good workmanship without the surrounding edges being damaged.

Aluminium and stainless steel shall be of approved manufacture and suitable for its particular application. Generally the surface of aluminium shall have an anodized finish and both shall comply with samples approved by Client /Consultant.

6. Laminate

6.1 All laminate shall be specified in Bill of Quantity and of approved make.

6.2 The contractor shall get the sample showing the surface texture, pattern and colour approved by Client / Consultant.

6.3 All edges, beading, etc. shall also be finished in Lipping's

7. Fabrication in Metal

7.1 All brazing and welds are to be executed in a clean and smooth manner, rubber down and finished in flat and tidiest way, particularly where exposed.

8. Glass Works

8.1 All glass is to be of approved manufacture, complying with 1.5. 3548-1960, or as per approved quality and sample, to be of the qualities specified and free from bubbles, air holes, waviness and other defects.

8.2 In cutting glass, proper allowances shall be made for expansion. Each square or rectangle of glazing to be in one whole sheet.

8.3 Glass for mirror shall be silvering quality conforming to 1.5.3458-1958 or as approved sample and quality.

8.4 On completion, all glass surfaces shall be cleaned inside and out. All cracked, scratched glass/ mirror shall be replaced.

8.5 Sun control film shall be non-reflective type, of approved make and shade. The fixing shall be without any defects such as air bubbles/ creases / adhesive marks, etc.

9. Paint and Polishes

9.1 All material required for the work shall be specified and approved manufacture, delivered to the site in the manufacture's containers with the seals, etc. unbroken and after use empty containers shall be stored till finally cleared by the Client.

9.2 All iron or steel/metal surfaces shall be thoroughly scraped and rubbed down with wire brushes and shall be entirely free from rust, mill scale etc. before applying the primer coat.

9.3 Melamine polish finishes shall be properly finished, without any flow marks, spots, roughness etc.

Contractor's Seal and Signature

Painting work shall be of high standard, without any brush marks on the finished surfaces and no spots on adjacent furniture, glass, etc.

Spray painting with approved machines will be permitted only if written approval has been obtained from the Client /Consultant. Neither spraying will be permitted in the case of priming coat nor where the soiling of adjacent surfaces is likely to occur. The buzzle and pressure to be so operated has to give and even coating throughout to the satisfaction of the Client /Consultant. The paint used for spraying is to comply generally with the specification concerned and is to be specially prepared by the manufacture for spraying. Thinning of paint made for brushing will not be allowed.

All brushes, tools, pots, kettles etc. used in carrying out the painting works shall be clean and free from foreign matter and to be thoroughly cleaned out before use with a different type of class of material.

Prior to painting, the surface preparation should be done as per IS code: 14177 1994 Para 4.2.1, 5.2.1.1, 5.2.2.1, 5.2.3. In the case of maintenance operation, the surface preparation should be done as per Para 7.00 of IS 14177:1994

For primer and finist1ing coat, the painting work should be carried out strictly as per 5.2.1.2, 5.2.1.3, 5.2.2.2 and 5.2.2.3 of IS Code.

Painting should be done invariably using airless spray equipment as per IS: 14177 1994 wherever recommended.

Proper care should be taken for deciding the compatibility of primer paint with paints used for finishing coats, including thinner on the basis of manufacturer's recommendation.

Enamel paint should confirm to IS 133 - 2004

Wood filler, transparent liquid should confirm to IS: 345 - 1952 (with amendment Nos. 1 and 2 reaffirmed 1986).

French polish if to be done as per specific requirement should confirm to IS 348 1968 (First revision, with amendment Nos 1, reaffirmed 2001)

Painting on concrete, masonry and plastered surfaces should confirm to IS: 2395 (Pt - I) - 1994 (Operations workmanship re affirmed 2005) Plastic emulsion painting for interior use should confirm to IS 5411 (Pt-I) - 1974 (with amendment No: 1, reaffirmed 1993)

10. Civil Work

10.1 The Contractor shall use cement of approved make only.

10.2 Only first quality ceramic tiles / vitrified tiles of approved make shall be used. All tiles joints shall be filled up properly using cement slurry mixed with matching pigments.

10.3 Only best quality granite and marbles of specified and of approved shade shall be used. The granite/marble shall be from the same lot and without colour / shade variations or any other defects.

10.4 All edge chamfers / cutting of granite / marble shall be mirror polished and no extra shall be paid for the same. In the case of Urinal partitions / sink partitions, the granite slab used for partition should be polished on both sides.

11. Upholstery

This will be of first call standard workmanship with webbing, no sag spring, coiled springs, padding and filling as specified on drawing. Covering fabrics will be seen tufted and corded as shown on the drawing and as approved by the Client /Consultant. Cushion Vents- Brass Cushion vents should be installed at the back or under side of seat cushions (especially those covered in leather vinyl plastics or very tightly woven fabrics) to allow air to escape easily and to prevent tearing.

Materials- Finished timber shall be of the type specified. Furnishing fabrics, colour, pattern, substance to be as specified and manufacture, or supplied by the company specified, no variations of this will be permitted unless with prior approval of the consultants. The sample of the upholstery should be got certified from the Client /Consultant, before placing orders.

12. <u>Polish</u>

12.1 French Polish

The basic material shall be shellac dissolved non methylated spirit. The timber must be well sanded and clean and the grain filler. Any staining must be done before applying the polish.

By pad of cotton with soft white linen or cotton fabric, apply evenly over the surface with a slow figure of eight motion until the timber is coated with a thin layer of polish. Allow the work to stand for at least 8 hours, and the fresh rubber with double thickness of cover material and charges it with methylated spirit.

12.2 Wax Polish

Wax polish shall contain silicon's and driers. A good silicon wax is to be used not a creamy or sprays. Timber shall be sealed first with another finish such as Ron seal, before applying wax.

Apply a light coat of the sealer by brush or cloth direct to the unfilled timber, working it well in and finishing evenly with the grain. Allow to dry thoroughly then sand lightly with fine paper. Apply a heavy coat of wax by cloth or on flat surfaces with a stiff brush. Work it well into the timber and finish of by stroking with grain before leaving to harden. Leave for several hours before rubbing up with a soft brush. Finally buff the grain with a soft cloth.

12.3 Transparent Coloured Polyurethane (Melamine)

This shall be applied where natural grain of the wood is required to show. Polyurethane gives tough surface which resist chipping, scratching and boiling water. Clean off all grease and wax with an abrasive and white spirit, this should not be applied in humid conditions. Apply the first coat, preferably of clear hard glaze with a cloth pad. Leave this to dry for at least six hours, and then apply further coats with a paintbrush. If you wait for longer than 24 hours between coats, rub down the previous coat with fine glass paper or a medium grade steel wool. Obtain a matt finish, if required, by giving a final coat of clear Ron seal Matt Coat.

MODE OF MEASUREMENTS

The measurements will be made in terms of relevant IS codes and will be made in meters and will be as per I.S code. The method of measurements for each item is as given under:

1 DOORS, WINDOWS, ROLLING SHUTTERS AND GRILLS

Clear area over one face inclusive of frame shall be measured. Hold fasts and portions embedded in masonry or flooring shall not be measured.

2 PARTITIONS IN WOODWORK

The partition height shall be measured up to bottom of false ceiling finished level and framing members / ply going above shall not be measured.

3 DECORATIVE PANELING OVER WALL OR OVER PARTITIONS

The area of cladding shall be measured in square meter. The gross area cladded will be measured. No deductions will be made for gaps up to one centimetre between the panels

4 <u>CARPETS</u>

The actual area covered by the carpet shall be measured. No extra shall be allowed for wastage.

5. PAVING AND TILE WORK

The work mentioned in this section shall be measured in Sq.m. and shall be priced per unit of Sq.m. In all paving work, the slabs shall be touching the walls and go well under the plaster, but the measurements shall be the clear measurements of the rooms or areas when finished. No allowance shall be made for portions going under the plaster. The wall dado will also be measured as per the clear measurements of the visible area only.

6. <u>ALUMINIUM/uPVC SLIDING WINDOWS</u>

The measurement of aluminium/uPVC sliding windows shall be taken only after the frame along with the shutter is fixed in its final finished position in line level and plumb. Width and height shall be measured net between the outer edges of the window frames.

7. STORAGE UNITS

The area will be measured in Sq.m on the actual facing size.

8. FALSE CEILING

For false ceiling work, the measurement shall be for the actual area covered. No deduction shall, be made for the cut-outs, for light fittings, speakers, column up to 1.5 Sqm.

9. PAINTING

The rates include all scaffoldings, ladders, paints, cans, brushes and other appliances required for the efficient execution of the work. The rates also include conveyance, delivery, handling, unloading, storing, wastage, protective cover and cleaning stains from floors and walls, glass panes etc. and also preparatory works such as knotting, priming stopping and rubbing down, burning off or stripping etc. The rates for special conditions of works not mentioned in the tender will be finalized by Client /Consultant considering the site conditions and nature of specialty required, which will be final and binding on the contractor.

Measurements

No deduction will be made for openings not exceeding 0.5 Sq.m each and no addition will be made for painting to beadings, mouldings, edges, jambs, soffits, sill etc. of such openings.

Corrugated sheet surfaces will be included with plain surfaces after increasing their areas by the following percentages:-

- (i) Corrugated sheets 14%
- (ii) Asbestos cement sheets corrugated 20%
- (iii) Asbestos cement sheets semi corrugated: 10%

Areas of uneven surfaces will be converted into equivalent plain areas in accordance with table given below:

| Table of Equivalent Plain Areas of uneven Surfaces |
|--|
|--|

| SI.No. | Description of work | How measured | Multiplying factor |
|--------|--|--|-------------------------------|
| 1 | ledged and battened or ledged, battened and brazed joinery frame. Edges, chocks, cleats etc. should be deemed to be included in this item | | 1.30 (for each side) |
| 2 | Flush joinery | Do | 1.20 (for each side) |
| 3 | Fully glazed or gauged joinery | Do | 0.80 (for each side) |
| 4 | Partly panelled and partly glazed or gauged joinery | Do | 1.00 (for each side) |
| 5 | Fully Venetia Ned or louvered joinery | Do | 1.80 (for each side) |
| 6 | Weather boards | Measured flat (Not girthed) supporting frame work shall not be measured separately. | 1.20 (for each side) |
| 7 | Guard Bars, Balustrades gales, gratings, grills, expanded metal and railings, gates and open for open palisade fencing including standard braces, rails stays etc. | Measured flat overall. No deduction shall be made for open spaces. Supporting members will not be measured separately. | 1.00 (for painting all over) |
| 8 | Carved or enriched work | Measured flat | 2.00 (for each side) |
| 9 | Steel rolling shutters | Measured flat (size of opening) overall, jamb guides, bottom rails and locking arrangement, etc., shall be included in the item (top cover will be measured separately) | 1.10 (for each side) |
| 10 | Plain sheet steel doors and windows | Measured flat (not girthed) including frame, edges etc. | 1.10 (for each side) |
| 11 | Fully glazed or gauged steel | Do | 0.50 (for each side) |
| 12 | Partly Panelled and partly glazed steel doors. | Do | 0.80 (for each side) |
| 13 | Collapsible gate | Measured flat (size of opening) | 1.50 (for each side) |

LIST OF APPROVED MAKES OF MATERIALS FOR INTERIOR WORK

| S.No | Description | Make | |
|------|----------------------------------|--|--|
| 1. | Moisture Resistant Grade Plywood | Greenply / Century | |
| 2. | Flexi plywood | Greenply / Century | |
| 3. | Prelaminated MDF Board | Century / Associate /Merino | |
| 4. | Laminate | Century / Associate /Merino | |
| 5. | Edge Band Tape | Rehau | |
| 6. | Glass | Modifloat / Saintgobain | |
| 7. | Mirror | Modifloat / Saintgobain | |
| 8. | Cabinet / Storage Hardware's | Ebco | |
| 9. | Hardware's for Joinery | Dorma / Geze | |
| 10. | Wood for Door Frame | African teak wood | |
| 11. | Shutter core wood | Pine wood | |
| 12. | Wood for Fit-out and Furniture's | Rubber wood | |
| 13. | Gypsum board False ceiling | Gyproc | |
| 14. | Aluminium sections | Jindal Aluminium Limited | |
| 15. | Rock wool | Rockwool India Pvt. Limited | |
| 16 | Grid Ceiling | Armstrong World Industries (India) Ltd | |
| 17. | Modular Chairs | Featherlite | |
| 18. | Blinds | Vista / Mylux | |
| 19. | Toilet cubicles | Merino | |
| 20. | Emulsion painting | Asian | |

GENERAL SPECIFICATION

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1.0 TECHNICAL SPECIAL CONDITIONS

1.1 INTRODUCTION:

This Tender covers Electrification of the Educational Building comprising of LT Panels, Lighting and Power Distribution, Earthing, Building Electricals, Lightning Protection etc.,

1.2 ELECTRICAL SYSTEM DETAILS:

| Incoming Supply | 415V, 3 Phase, 4 wire |
|-----------------------------------|-----------------------|
| Operating Voltage | 415V, 3 Phase, 4 wire |
| Operating Voltage for Receptacles | 220V, 1 Phase, AC |
| Operating Voltage for Lighting | 220V, 1 Phase, AC |

1.3 BRIEF DESCRIPTION AND SCOPE OF WORK:

M/s. Sri Ram Educational Trust is planning to Interior works in College building. The scope of work covered shall include, but not limited to, Design, Manufacture, and Test at Works, Supply, Installation, Testing and Commissioning of the following.

1.4 **GROUND FLOOR TO THIRD FLOOR:**

Power Distribution

- > Convenient Sockets for UPS and Raw Power distribution.
- > Cables, Cable Terminations.
- > Aluminium Floor Trunking etc.

Lighting Distribution

- > Light Fittings Switches / Switch Boxes UPS for Emergency Lighting.
- Wiring for Light Fittings, GI Conduits, Clamps and Accessories Slotted Channel, Threaded rod and Accessories.

Downstream Distribution for other Services

Main power panel for VRF, Individual Air conditioner units and Auxiliaries cables and terminations convenient sockets and its wiring Distribution Boards provision of floor trunking for Data & Server sockets.

1.5 SPECIFIC INCLUSIONS:

Unloading, Safe Keeping and Leading to erection site of all supplied items. Prefabricated GI Cable trays, bends, couplers and supports. Provision of Anchor Fastener for Cable Trays / Ceiling Fans / Light Fittings etc.

Vertical & Horizontal prefabricated cable racks. Epoxy painted steel angles and channel support, wire ropes for cable trays. Epoxy painted steel support channels for panels / DB's. Excavation of trench for cables, earth bus, excavation of pits for earth electrode, Construction of earth pits. Chipping, Breaking and making good the damaged portion of civil works.

Safety Items like, rubber mats, fire extinguishers, fire buckets, Safety charts, danger boards, mounting rack for substation tools / keys, The Contractor shall consider local safety & maintenance requirements and shall include within his bid all Test / Safety and maintenance equipment he shall supply. Calibration & Testing of all protective relays, meters & other measuring and protective devices. Relay Co-ordination / Setting. Co-operation / Co-ordination for testing and commissioning with other suppliers.

1.6 TENDER CLARIFICATION

Clarifications required by the Tenderer either on commercial or technical matters may be sought from Consultant / Client, in writing within 3 days from the date of issue of tender. Failure to respond by Consultant / Client will not affect the terms of the tender document and it is assumed that the tenderer has fully understood the tender document.

2.0 TECHNICAL SPECIFICATION FOR WIRING

2.1 <u>SCOPE:</u>

This specification covers the standards of internal wiring.

2.2 INTERNALWIRING:

The system shall consist of FRZH multi-stranded copper wires in FRLS PVC Concealed Conduit. All open wiring shall be in ISI MS conduits laid on the surface for 230V power supply. All low voltage wiring system for data, voice, CCTV, TV and Wi-Fi are laid in PVC Conduit.

2.3 <u>GENERAL:</u>

Prior to laying and fixing of conduits, the Contractor shall carefully examine the working drawings prepared by him and approved by the Consultant, indicating the layout, satisfy himself about the sufficiency of number and sizes of conduits, location of junction boxes, sizes and location of switch boxes and other relevant details. Any discrepancy found in the drawings shall be brought to the notice of the Client site representative. Any modifications suggested by the contractor shall be got approved before the actual laying of conduits is commenced.

In lying of conduits it is important that not more than two right angle bends are provided for each circuit and as far as possible, No junction box shall be provided in the entire length of conduit run for drawing of wires. Only switch outlets, lighting fixture outlets, equipment power outlets and socket outlets shall be considered for drawing of wires.

2.4 <u>CONDUITS:</u>

Conduits and Accessories shall confirm to relevant Indian Standards. Joints between conduits and accessories shall be securely made. Only approved make of conduits and accessories shall be used. Conduits shall be delivered to the site of construction in original bundles and each length of conduit shall bear the label of the manufacturer.

Maximum permissible number of 1100 volt grade wires that may be drawn into rigid non-metallic or MS/ GI Conduits are given below:

| Size of wires Nominal Cross section Area (Sq. mm.) | Maximum number of wires within conduit size(mm) | | | | |
|--|---|----|----|----|----|
| | 20 | 25 | 32 | 40 | 50 |
| 1.5 | 5 | 10 | 14 | | |
| 2.5 | 5 | 8 | 12 | | |
| 4 | 3 | 7 | 10 | | |
| 6 | 2 | 5 | 8 | | |
| 10 | | 3 | 5 | 6 | |
| 16 | | 2 | 3 | | 6 |
| 25 | | | 2 | 4 | 6 |
| 35 | | | | 3 | 5 |
| | | | | | |

2.5 BENDS IN CONDUIT:

Where necessary, bends or diversions may be achieved by means of bends and / or circular inspection boxes with adequate and suitable inlet and outlet joints. In case of recessed system

each junction box shall be provided with a cover properly secured and flush with the finished wall surface. No bends shall have radius less than 4.5 cms or three times the outside diameter of the conduits.

2.6 FIXING OF CONDUITS:

All conduits, shall be installed so as to avoid steam and hot water pipes. After the conduits, junction boxes, outlet boxes and switch boxes are installed in position, their outlets shall be properly plugged or covered so that water, mortar, insects or another foreign matter does not enter into the conduit system. Recessed conducting shall be done by making chase in the masonry by chase cutter, the conduit shall be fixed in the chase by means of GI hooks not more than 600 mm apart. After fixing of conduit the chase shall be filled with cement mortar after fixing of chicken mesh and brought to the original finish level of the surface. All surface conduits shall be clamped at every 600mm intervals. The Bends shall be clamped at 300mm on either side.

2.7 SWITCH OUTLETS AND JUNCTION BOXES:

All outlet boxes for switches, sockets and other receptacles shall be rust proof and shall be of 2 mm thick mild steel sheets with HOT dipped galvanizing (or as specified in BOQ), having smooth external and internal surfaces to true finish. All outlet boxes for receiving plug sockets and switches shall be fabricated to approve sizes. All boxes shall have adequate number of knock out holes of required diameter and earthing terminal screws. Outlet boxes shall be of a minimum depth of 65 mm.

2.8 INSPECTION BOXES:

50 mm dia inspection boxes of cast iron shall have smooth external and internal finish to facilitate removal and replacement of wires, where required.

2.9 CONDUCTORS:

All FRLS PVC insulated copper conductor wires shall conform in all respects to Indian Standards.

2.10 BUNCHINGOF WIRES:

Wires carrying current shall be so bunched that the outgoing and return wires are drawn into the same conduit. For lighting wires originating from two different phases shall not run in the same conduit. All wires shall have ferrules for identification. Lighting and power circuits shall be separate.

2.11 DRAWING CONDUCTORS:

The drawing and jointing of FRLS PVC insulated copper conductor wires shall be executed with due regard to the following precautions. While drawing wires through conduits, care shall be taken to avoid scratches and kinks which may cause breakage of conductors. There shall be no sharp bends. Wire reel stands to be used for pulling of wires to avoid kinks.

Insulation shall be removed by insulation stripper only. Strands of wires shall not be cut for connecting terminals. The terminals shall have sufficient cross sectional area to take all strands and connecting brass screws shall have flats ends. All looped joints shall be connected through terminal block/connectors. The pressure applied to tighten terminal screws shall be just adequate, neither too much nor too less. All light points shall be terminated through a connector.

All light points shall be terminated through a connector. Conductors having nominal cross sectional areas exceeding 10 sq.mm shall always be provided with cable sockets. At all bolted terminals

brass flat washer of large area and approved steel spring washer shall be used. Brass nuts and bolts shall be used for all connections.

Only licensed wiremen (Before doing the work or before appointing him on site contractor has to submit his wiring license to Client) and cable jointers shall be employed to do jointing work. All wires and cables shall bear the manufacturer's label and shall be brought to site in original packing. For all internal wiring FRLS PVC insulated wires of 1100 volts grade shall be used. The sub-circuit wiring for point shall be carried out in loop system and no joints shall be allowed in the length of the conductors. No wire shall be drawn into any conduit until all work of any nature that may cause injury to wire is completed. Care shall be taken while pulling out the wires so that no damage occurs to conduits/wire itself, the conduits shall be thoroughly cleaned of moisture, dust, dirt or any other obstruction. The minimum size of FRLS PVC insulated copper conductor wires for all sub-circuit wiring for light points shall be minimum 1.5 sq.mm copper Separate neutral to be pulled for each circuit.

2.12 <u>JOINTS:</u>

All joints shall be made at main switches, distribution boards, socket outlets, lighting outlets and switch boxes only. No joints shall be made in conduits and in junction boxes. Conductors shall be continuous from outlet to inlet.

2.13 COLOUR CODE OF CONDUCTORS:

Colour code shall be maintained as indicated by the Consultant for the entire wiring installations. Red, yellow, blue shall be for three phases, black for neutral and green with yellow band shall be for earthing.

2.14 LOW VOLTAGE WIRING DETAILS:

- Data Cable CAT 6 UTP Cable.
- > Voice Cable CAT 6 UTP Cable.
- CCTV Camera CAT 6 UTP Cable.
- > Wi-Fi Booster CAT 6 UTP Cable.

3.0 TECHNICAL SPECIFICATION FOR LIGHT FITTINGS AND ACCESSORIES

3.1 <u>SCOPE:</u>

This specification covers the design, material specification, manufacture, testing at works, inspection and delivery at site of light fittings and their associated accessories.

3.2 <u>STANDARDS:</u>

The LED light fittings and their associated accessories such as lamps / tubes, reflector, housings, Drive etc. shall comply with the latest applicable standards. All luminaries, lamps and accessories shall be of same make.

3.3 GENERAL REQUIREMENTS:

Fittings shall be designed for continuous trouble-free operation under hot humid atmospheric conditions, at the specified ambient temperature, without reduction in lamp life or without deterioration of materials and internal wiring. Outdoor fittings shall be weather proof and rain proof type. The fittings shall be designed so as to facilitate easy maintenance, including cleaning, replacement of lamps / Drives etc. Connections between different components shall be made in such a way that they will not get loosened by small vibration. For each type of light fitting the Contractor shall supply the utilisation factor to indicate the proportion of the light emitted by the bare lamp which falls on the working plane. The fittings shall be supplied complete with lamps. The fittings and accessories shall be designed to have low temperature rise. The temperature rise above the ambient temperature shall be as indicated in the relevant standards.

Outdoor type fittings shall be provided with Weather Proof drive. Each fitting shall have a terminal block suitable for loop-in, loop-out and T-Off connection. The internal wiring shall be completed by the Manufacturer by means of stranded copper wire and terminated on the terminal block. All hardware used in the luminaries shall be cadmium plated /zinc passivated.

All light fixtures should have surge protection device.

3.4 EARTHING:

Each light fitting shall be provided with an earthing terminal suitable for connection to the earthing conductor. All metal or metal enclosed parts of the housing shall be bonded to the earthing terminal so as to ensure satisfactory earth continuity throughout the fixture.

3.5 PAINTING / FINISH:

 \triangleright

All surfaces of the fittings shall be thoroughly cleaned and degreased. The fittings shall be free from scale, rust, sharp edges and burrs. The housing shall be stove-enamelled / epoxy stove-enamelled / vitreous enamelled or anodised as indicated under various types of fitting. The finish of the fitting shall be such that no bright spots are produced either by direct light source or by reflection.

3.6 ACCESSORIES FOR LIGHT FITTINGS:

Drive

The Drive shall be designed, manufactured and supplied in accordance with the relevant standards. The drive shall be designed to have a long service life. Drive shall be mounted using self-locking, anti-vibration fixings and shall be easy to remove without de-mounting the fittings. They shall be in dust-tight, non-combustible enclosures. The drive shall be suitable to operate at 180V - 270V.

> All drives should have surge protection device.

Contractor's Seal and Signature

4.0 TECHNICAL SPECIFICATION FOR INSTALLATION

4.1 <u>GENERAL</u>

The electrical installation shall be complete in all respects and any item not included in the specification but essential for proper installation and functioning of the electrical system shall deemed to be included in the scope of the specification whether specifically mentioned or not. All equipment shall be shifted from the place of storage to erection site by the Contractor and shall be thoroughly cleaned of packing materials, scales, rust, oil, grease etc. prior to commencement of the installation work. All equipment shall be checked physically for the completeness of all devices before taking up installation. After installation, all unused cable/conduit entries shall be efficiently sealed, to prevent entry of Dust / Water and Vermin.

All equipment and accessories shall be installed strictly in accordance with the manufacturer's instructions / drawings. Equipment's supplied in sections or in dismantled condition, shall be reassembled at site with all associated accessories as per the manufacturer's instructions. All accessories required like hardware, junction box, glands, hylam sheets etc. shall be supplied by Contractor.

4.2 STANDARDS

The equipment shall be erected in accordance with the latest revision of relevant Indian Standards.

- IS: 2309 : Code of Practice for protection of Buildings and allied structure against Lightning.
- IS: 10118 : Code of Practice for Selection, Installation and Maintenance of Switchgear and Control Gear.
- IS: 12063 : Degree of Protection provided by enclosures.
- IS: 732 : Code of Practice for Electrical Wiring Installation.
- IS: 1646 : Code of Practice for Fire Safety of Buildings (General) Electrical Installation.
- IS: 3043 : Code of Practice for Earthing
- IS: 10028 : Code of Practice for Selection, Installation and Maintenance of Transformer.
- IS: 1255 : Code of Practice for installation and maintenance of power cables up to and including 33KV.

4.3 DRAWINGS:

The Contractor shall prepare all necessary installation / shop drawings based on the GFC drawings furnished by the Consultants.

All design calculation, installation drawings prepared by the Contractor, shall be submitted to the Client / Consultant for Comments / Approval.

The Contractor shall be responsible for preparing all the necessary drawings for submission and obtain approval from statutory authority including but not limited to CEIG / CEA / SEB.

All installation / shop drawings need to be approved by Engineer-in-Charge prior to start of Erection or Installation.

4.4 EQUIPEMENT AND MATERIALS:

All equipment and materials supplied by the Contractor shall be suitable in all respects, for the type of environment specified.

All equipment and materials supplied shall be as per the Recommended Makes and to the approval of the Client / Consultant regarding Quality, Conformity to the specification and standards and suitability for the specified site conditions.

4.5 STORAGE AND CARE PRIOR TO ERECTION:

The Contractor shall be fully responsible for the safe storage and care of equipment and materials. The Contractor shall be responsible for care and maintenance of all the Electrical equipment's, whether supplied /erected by him, after the installation is completed and until the final certificate of acceptance of Electrical Installation is signed.

4.6 EARTHING:

The overall earth resistance of the system shall not be greater than one (1) ohm. All panels, Distribution boards shall be provided with two (2) independent earth connections of adequate capacity to discharge the max. earth fault current. The size of Earth bus and earth electrode shall be as per specification and as per schedule. Minimum spacing between earth electrodes shall be provided as per IS:3043. Water stops shall be provided wherever earthing conductor enters the building from outside, below grade level.

4.7 INSPECTION:

After completion of erection/installation, each piece of equipment shall be thoroughly inspected in the presence of Engineer-in-Charge for correctness and completion of erection and operation.

4.8 STATUTORY REQUIREMENTS / APPROVAL FROM STATUTORY AUTHORITIES

The electrical installation shall be carried out in accordance with this specification and complying with the relevant statutory requirements and national standards. It shall be the responsibility of the Contractor to obtain approvals of competent Central or State Government authorities and satisfy them regarding the compliance with relevant regulations for this scope of work. The Contractor should possess a valid **EA grade** license issued by the Electrical Licensing Board. The work should be carried out only under the supervision of licensed supervisors. The licenses possessed by the Contractor's supervisor shall be made available to the Engineer-in-Charge for scrutiny before commencement. Test certificate for installation shall be prepared in the form required by Chief Electrical Inspector / Electricity Board. Any rework on account of remarks by Electrical Inspector shall be carried out by the Contractor at no extra cost.

5.0 TECHNICAL SPECIFICATION FOR TESTING AND COMMISSIONING

5.1 <u>GENERAL:</u>

The testing and commissioning for all electrical equipment at site shall be according to the procedures laid down below:

All electrical equipment shall be installed, tested and commissioned in accordance with the latest relevant Standards and Codes of Practices published by Indian Standards Institution wherever applicable and stipulations made in relevant general specifications. The testing of all electrical equipment as well as the system as a whole shall be carried out to ensure that the equipment and its components are in satisfactory condition and will successfully perform its functional operation. The inspection of the equipment shall be carried out to ensure that all materials, workmanship and installation conform to the accepted design, engineering and construction standards, as well as accepted codes of practice and stipulations made in the relevant general specifications. All tests shall be carried out by the Contractor using his own instruments, testing equipment as well as qualified testing personnel. The results of all tests shall be conforming to the specification requirements as well as any specific performance data guaranteed during finalisation of the contract.

5.2 PREPARATION OF THE ELECTRICAL SYSTEM FOR COMMISSIONING:

After completion of the installation at site and for the preparation of plant commissioning, the Contractor shall carry out check and testing of all equipment and installation in accordance with the agreed standards, codes of Practice of Indian Standards Institution and specific instruction furnished by the particular equipment suppliers as well as Contractor. Checking required to be made on all equipment and installations at site shall comprise, but not be limited, to the following: The following checks shall be made on all equipment and installations at site:

- Physical inspection for removal of any foreign bodies, external defects, such as damaged insulators, loose connecting bolts, loose foundation bolts etc.
- > Check for grease, insulating/lubricating oil leakage and its proper quantity.
- Check for the free movement of mechanism for the circuit breakers, rotating part of the rotating machines and devices.
- Check for tightness of all-cable, bus bars at termination/ joints ends as well as earth connections in the main earthing network.
- > Check for clearance of live bus bars and connectors from the metal enclosure.
- Check for proper alignment of all draw out device like draw out type circuit breakers.
- > Continuity check in case of power cables.
- Checking of all mechanical and electrical interlocks including tripping of breakers using manual operation of relay.
- Check proper connection to earth network of all noncurrent carrying parts of the equipment and installation.
- > Tests reports for all meters are to be furnished.

The tests that shall be carried out on the equipment shall include but not be limited to the following:

Earthing System

- > Tests to ensure continuity of all earth connections.
- > Tests to obtain earth resistance of the complete network by using earth tester.

The test values obtained shall be within the limits.

Test Reports

All documents / records regarding test data, oscillographs and other measured values of important parameters finalised after site adjustment shall be handed over to the Contractor in the form of test reports for their future use and reference. All tests shall be witnessed by the Client and all the results shall be filled up with Contractor's text format and shall be submitted to Client.

6.0 RECOMMENDED MAKES OF EQUIPMENT

- > SWITCH / SOCKETS : LEGRAND MYRIUS™ / MK BLENZE PLUS / SCHNEIDER OPALE
- FAN : USHA / CROMPTON / HAVELLS
- > WIRES : POLYCAB / RR / FINOLEX / SIECHEM FRLS Cu. WIRE
- > DATA / VOICE CABLE : SCHNEIDER Actassi / COMMSCOPE / LEGRAND CAT 6 FTP Cable
- > DATA RACK : WALL RACK / NET RACK
- > PATCH PANEL : SCHNEIDER Actassi / COMMSCOPE / LEGRAND Full loaded
- > LIGHT FIXTURES : WIPRO / CROMPTON / PHILIPS / PANASONIC / LUKER
- > PVC CONDUIT (HEAVY DUTY) : AVONPLAST / PRECISION / ANCHOR PANASONIC / POLYCAB
- > MS CONDUIT (ISI / IS MARKED) : GUPTA / BHARAT / SUPREME / VIMCO