



INDIAN BANK
FGM OFFICE , NEW DELHI-110001

TENDER DOCUMENT FOR
FIRE FIGHTING SYSTEMS- INSTALLATION AND REPAIR WORKS AT 17,
PARLIAMENT STREET BUILDING, INDIAN BANK

PART I – TECHNICAL BID

Issued to:

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|---|---|
| Last date for submission of Bid | 08.07.2024- 15.00hrs , through online mode only, at Indian Bank, FGM office, Premises dept., 1 st floor, 17, Parliament street, Delhi- 110001 |
| Date of Opening of Technical Bid | 08.07.2024- 16.00hrs , through online mode only, at Indian Bank, FGM office, Premises dept., 1 st floor, 17, Parliament street, Delhi- 110001 |
| Date of Opening of Financial Bid | To be intimated separately to the Firms Qualifying in Technical Bids |

FIRE WORKS ARCHITECT /CONSULTANT:
M/s Vastu Manadal

Email -vastumandal@gmail.com

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FGM OFFICE –DELHI NOTICE INVITING TENDER

Indian Bank, FGMO Delhi , invites sealed bids under Two Bid System containing Part-I (Technical Bid) & Part –II (Financial Bid) from Established Fire Safety Contractors complying minimum qualification criteria for Fire Fighting system Works as per Tender and having full time local office in New Delhi/NCR, for Fire Fighting Systems- Installations and repair works at 17, Parliament Street Building, Indian Bank, Delhi-110001 . The Tender Documents can be downloaded from the Bank's website (www.indianbank.in) under Tender Column.

| | | |
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| 1 | Name of work | Fire Fighting Systems- Installations and repair works at 17, Parliament Street Building, Indian Bank, Delhi-110001 |
| 2 | Estimated cost of work | Rs. 45.75 Lakhs plus applicable GST. |
| 3 | Period of completion | 45 days to be reckoned from 7 th day from the date of issue of the Work Order or handing over of site whichever is later |
| 4 | Validity of Tender | 90 Days from the date of opening of financial bid |
| 5 | Defects Liability Period | 12 Months from the date of virtual completion of work |
| 6 | Tender Fees | Rs.500/- (Rupees five hundred Only) by way of DD in favour of Indian Bank payable at New Delhi *Firms registered with MSME / NSIC with valid certificates issued by GOI are exempted from submitting Tender fees along with bid. |
| 6 | Earnest Money Deposit | Rs.92 , 000/- (Rupees Ninety Two thousand Only) by way of DD in favour of Indian Bank payable at Delhi. *Firms registered with MSME / NSIC with valid certificates issued by GOI are exempted from submitting EMD along with bid. |
| 7 | Initial Security Deposit (ISD) | 2% of the Bid Amount (Including EMD amount). |
| 8 | Retention Money (RM) | 5% of the Bill Amount (RA Bill / Final Bill) excluding Taxes |
| 9 | Total Security Deposit (TSD) = ISD + RM | 7% of the Bid Amount (ISD – 2% & RM – 5%) |
| 10 | Value of Work for interim payment | Rs 23,00,000/- (Rupees Twenty Three Lakhs Only) |
| 11 | Release of Retention Money | 50% of Total security deposit will be returned on completion of following: <ul style="list-style-type: none"> • After 15 days of the payment of the final bill. AND <ul style="list-style-type: none"> • Taking over certificate by Bank AND <ul style="list-style-type: none"> • Tenderer's removal of his materials, equipment, labour force, temporary sheds/stores etc. from the site. (Except for a small presence required if any for the Defect Liability Period and approved by the Indian Bank. Balance 50% of retention money shall released within 30 days after satisfactory completion of defect liability period and defects free as per the contract clauses. |
| 12 | Liquidated Damages | 1% per week of the Contract Value subject to maximum total of 10% of final Contract value |
| 13 | Tender Documents | Tender documents can be downloaded from the Bank's website https://www.indianbank.in/tenders (under Tenders column from 22/06/2024 to 08/07/2024 up to 15:00 HRS |

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| 14 | Last date for the submission of Bids | 08/07/2024 upto 15:30 HRS at Indian Bank, FGM office Delhi , Premises dept., 1 st floor, 17, Parliament street, Delhi- 110001. |
| 15 | Date of opening of Technical Bid | 08/07/2024 at 16:00 HRS at Indian Bank, FGM office Delhi, Premises dept., 1 st floor, 17, Parliament street, Delhi- 110001 |
| 16 | Date of Opening of Financial Bid | To be intimated separately to the Firms Qualifying in Technical Bids |
| 17 | Minimum Eligibility Criteria | <ol style="list-style-type: none"> Should be in same line of activity minimum for the past 7 years in carrying out similar nature of works ending 31/03/2024. <i>Please furnish Work Order / Client's Completion Certificate / Empanelment Letter issued by PSBs / PSUs / Central Government / State Government to confirm the same.</i> Should have Registered Office in Delhi/NCR. <i>Please furnish requisite document as proof.</i> Should have carried out similar work of value in the last 7 years (ending 31/03/2024). At least: <ul style="list-style-type: none"> Atleast one similar works of value not less than Rs.36.6 Lakhs each (OR) Atleast two similar works of value not less than Rs.22.9 Lakhs each (OR) Atleast three similar works of value not less than Rs.18.3 Lakhs each <i>Copy of TDS Certificate & Work Order / Completion Certificate showing value of work satisfying the above eligibility criteria is to be enclosed.</i> <p>Similar works means: FIRE FIGHTING system installations and commissioning works done for high rise buildings. Exclusions- All Civil works such has painting, tile flooring and repair works, Electrical works and electrical fixture supply, curtains, blinds, plumbing, CCTV, HVAC, networking, supply of all type of chairs & sofas, PA systems and glazing works, interior furnishing work.</p> Should have valid GST No. The participating bidder shall have profit before tax in at least 3 out of last 5 financial years. (Please attach copy of the audited balance sheets along with profit and loss statements for corresponding years and/or certificate of the chartered accountant with details to be provided. Should have a minimum average annual turnover of Rs. 13.75 lakhs during the last three financial years) Should have minimum solvency of Rs. 13.75 Lakhs issued by a Scheduled Commercial Bank on or after 01/01/2024 Should be registered with Income Tax Authority <i>The bidders must satisfy the above criteria and furnish the relevant documents as proof. If the Vendors fails to provide relevant documents and meet the minimum eligibility criteria as mentioned above, Bank would disqualify the bidder without assigning any reason whatsoever.</i> |

Note:

- Tenderers are required to submit the bid in 2 parts namely Technical bid and financial bid. The Technical bid is to be submitted in sealed cover along with, Necessary documents prescribed in the Bids, Forms and EMD. The Financial bid shall be submitted in a separate sealed cover. The Technical and Financial bids are to be put in a master envelope (3rd Cover) and sealed and super-scribed 'Fire Fighting Systems- Installations and repair works at 17, Parliament Street Building, Indian Bank, Delhi-110001' and addressed to the Deputy General Manager, Indian Bank, FGM office Delhi, 1st floor, 17, Parliament street, Delhi- 110001
- It is highly advisable to the tenderers to visit the site before submitting the bid. Date of Site Visit must be within working hour's i.e between 10:00 am to 5:00 pm on all working days from 22/06/2024 to



08/07/2024. Bank is not liable to make any payment to Tenderers either for inspection of site or for preparation to submit the tender / bid.

3. Conditional tenders, late tenders, tenders without tender fees, EMD or EMD not enclosed with Technical Bids, will be summarily rejected. Any tender received open, late or not meeting all the tender conditions / Bids not filled up in Pen are liable to be rejected.
4. Earnest money & Initial Security Deposit will not carry any interest.
5. The Companies who are registered with Micro, Small & Medium Enterprises and also those having valid NSIC certificate under Government Store Purchase Programme having certificate clearly indicating the amount of "Quantitative Capacity Per Annum" (amount of Quantitative Capacity Per Annum shall be more than the estimated cost of work) are exempted from the submission of Tender document fee/EMD on submission of requisite proof in the form of valid certification from MSME and NSIC.
6. If any information furnished by the applicant is found incorrect at a later stage, he shall be liable to be debarred from taking up the work in Indian Bank.
7. The Bank reserves the right to verify the particulars furnished by the applicant independently.
8. Short-listing of contractors will be finalized after inspection of works and obtaining confidential reports (if required) from previous employers for only those firms who fulfil the aforesaid Pre- qualification criteria and that specified in Technical bid.
9. Bank is not bound to accept the Lowest (L1) bidder and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.
10. Submission of this tender document by a bidder implies that he/she has read this notice and other contract /documents and has made himself aware of the scope, specifications, conditions, liabilities and duties bearing on the execution of the contract.
11. Return of EMD of remaining bidders who were unsuccessful in the bidding process will be done within a reasonable time say not exceeding 14 days from the date of acceptance of tender submitted by the L1 bidder.
12. Each and every page of the tender documents and correspondences accompanying the tender shall have to be duly signed and stamped by the Bidder/Authorised Signatory before submission.
13. The rates quoted by the bidder shall be based only on the specifications and conditions of the tender documents.

DEPUTY GENERAL MANAGER



FORM OF TENDER

The Deputy General Manager
Indian Bank, FGM office Delhi,
1st floor, 17, Parliament street,
Delhi- 110001

Dear Sir,

SUB: Invitation of Tender for Fire Fighting Systems- Installations and repair works at 17, Parliament Street Building, Indian Bank, Delhi-110001'

Having duly examined the tender documents including the specifications, bill of quantities relating to the works specified in the underwritten memorandum and having visited/ inspected the site of the said works and having acquired all the requisite information relating thereto as affecting this tender, I/We hereby offer to execute the above works at the respective rates which I/We have quoted for the items in the Schedule of Quantities.

I/We further agree to complete the work within the stipulated time as specified in the Tender Document.

I / We understand that Indian Bank is not bound to accept the lowest tender or bound to assign any reasons for rejecting our bid.

In the event of this bid being accepted, I/We agree to enter into and execute the necessary contract required by you. I/We do hereby bind myself/ourselves to forfeit the aforesaid Earnest Money Deposit in the event of our refusal or delay in signing the Contract Agreement.

I / We understand that Indian Bank may award the work to more than one Contractor and I / We shall make no claims whatsoever if Indian Bank accept only a part of my / our tender.

I / We unconditionally agree to Indian Bank's conditions as stipulated in the Documents.

I/We agree to keep our bid open for **90 (Ninety) days** from the date of opening of financial bids.

I / We agree that incase of my / our failure to execute the work in accordance with the specifications and instructions received from the Bank during the course of the work, Bank reserves the right to terminate my work order and recover all the dues to the Bank from the payment receivable by me. Further, I may also be barred from participating in any type of bid invited by Bank or its subsidiaries in future.

Thanking you,

Yours faithfully,

[To be signed by the Authorized Representative of
Firm who has the Power to do so]

Place:

Date:

Name:

Address:

Seal:

Pre-Qualification Criteria for Fire Fighting Systems- Installations and repair works at 17, Parliament Street Building, Indian Bank, Delhi-110001'

The intending bidders shall fulfill the following minimum **Criteria for pre-qualification (PQ)** bidding for the above jobs:-

1. EXPERIENCE:

- Tenderer should be in the same line of activity minimum for the past 7 years in carrying out similar nature of works ending 31/03/2024. Please furnish work order / Completion Certificate / Empanelment Letter issued by PSBs / PSUs / Central Govt. or State Govt. Departments.
- Tenderer should have carried out similar work of value in the last 7 years ending 31/03/2024 as mentioned below:

| Sr.No. | Eligible Work | Value-Rs. In Lakhs without Taxes |
|--------|--|----------------------------------|
| 1 | Three similar completed works each costing not less than(nearly 40%cost of estimated amount) | 18.3 |
| 2 | Two similar completed works each costing not less than (nearly 50% cost of estimated amount) | 22.9 |
| 3 | One similar completed works costing not less than (nearly 80% cost of estimated amount) | 36.6 |

In the Last five years ending 31/03/2024, Similar works means: FIRE FIGHTING system installations and commissioning works done for high rise buildings. Exclusions- All Civil works such as painting, tile flooring and repair works, Electrical works and electrical fixture supply, curtains, blinds, plumbing, CCTV, HVAC, networking, supply of all type of chairs & sofas, PA systems and glazing works, interior furnishing work and related to Schedule of Quantities items only. Bidders have to make sure that all the relevant documents should be submitted as required for Pre-Qualification. Submission of Short-fall documents after opening of bids will not be allowed. Copy of TDS Certificate and Work Completion Certificate showing value of work satisfying the above eligibility criteria is to be mandatorily enclosed.

- TURNOVER:** Average annual turnover from the works for the last three financial years ending should not be less than Rs.13.75 Lakhs as per the audited balance sheet.
- PROFIT / LOSS:** -. The participating bidder shall have profit before tax in at least 3 out of last 5 financial years as. (Please attach copy of the audited balance sheets along with profit and loss statements for corresponding years and/or certificate of the chartered accountant with details to be provided.
- SOLVENCY CERTIFICATE:** - The contractor should have a latest solvency of minimum amount of **Rs. 13.75 Lakhs** duly issued by any Scheduled Commercial Bank obtained on or after **01/01/2024**.
- The firm should have registered office in Delhi NCR and should have valid GST No.
- Other conditions:
 - Interested parties meeting the above Tender criteria can download the tender document from Bank website www.indianbank.co.in and submit experience profile, proof of meeting the above criteria, attested copies of completion/ work in progress certificates from the clients, audited certified balanced sheet for the last 3 financial years, EPF, ESIC/GST Registration, Application not accompanied by any of the above documents and EMD will be rejected without assigning any reason whatsoever.



- b) No Joint Venture or consortium of firms shall be allowed.
- c) The contractor should have **adequate tools and equipment** required for proper execution of work in the prescribed time.
- d) The contractor should have **sufficient number of technical and administrative personnel** for proper execution of contract. The contractor should submit a list of their employees.
- e) Indian Bank reserves the right to verify the authenticity of the documents submitted by the contractors. Indian Bank also reserves the right to reject any oral applications, split the works or cancel the process without assigning any reason whatsoever may be.

DEPUTY GENERAL MANAGER

GENERAL INSTRUCTIONS

1. Definition of terms / interpretation:

- Employer/Owner/Bank /Indian Bank/ Accepting Authority shall mean Indian Bank with their FGM OFFICE DELHI at **1st floor, 17, Parliament street, Delhi- 110001.** and any of its employees representative authorized on their behalf.
- Throughout these bidding documents, the terms “bid” and “tender” and their derivatives (“bidder”/“tenderer”), “bidded /tendered”, “bidding”/“tendering”, etc. are Synonymous.
- Day means calendar day. Singular also means plural.
- “Contractor” means the person whose Tender has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person.
- Tenderer: The term ‘Tenderer’ shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representative(s) of such individuals or persons composing such firm or company or successors of such firm or company as the case may be and permitted assigns of such individual or firm or company.

2. Eligible Tenderers

This Invitation to Tender bid is open to all experienced and reputed firefighting system installation Contractors whether Individual or Sole Proprietor, Partnership firm, Private limited, or Public Limited Company who satisfy the qualifying criteria. Joint ventures are not accepted.

3. Submission of Tender

The Tender must be submitted in Original or as per details given here under. The rates shall be filled in the schedule given in Part – II of the Tender Document

Tender should be submitted in two parts in separately sealed envelopes as described below:

- PART – I: TECHNICAL BID
- PART – II: FINANCIAL BID

The Technical bid is to be submitted in sealed cover along with tender fees, Necessary documents prescribed in the Bids, Forms and EMD. The Financial bid shall be submitted in a separate sealed cover. The Technical and Financial bids are to be put in a master envelope (3rd Cover) and sealed and super-scribed ‘Tender for Supply, Installation, Testing and Commissioning Of firefighting system at Indian Bank, **FGM OFFICE DELHI** at 1st floor, 17, Parliament street, Delhi- 110001. and addressed to the Deputy General Manager, 17, Parliament Street Building, Indian Bank, Delhi-110001

4. Qualifying Criteria

As given in Page No 7 & 8 of this Tender Document
Additional Information –

Even though the tenderers meet the above qualifying criteria, they are liable to be disqualified if they have:

- a) Made misleading or false representation in the forms, statements and attachments in proof of the qualification requirements;
- b) Records of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion, penalty, litigation history or financial failures etc.
- c) Their business banned by any Central or State Govt. Department/Public Sector Undertakings / Public Sector Bank’s

- d) Not submitted all the supporting documents or not furnished the relevant details as per the prescribed format.
- e) Anyone of the partners (in case of partnership firm) or any Directors in case of pvt ltd., or public ltd firm being convicted by a Court of law.

5. Site Visit

- a) The tenderer is advised to visit (upon prior approval), and examine the Site of Works and its surroundings and obtain for itself on its own responsibility and cost all information that may be necessary for preparing the bid and entering into a contract for supply and installation Works as mentioned in tender document.
- b) The tenderer and any of its personnel with authority letter will be granted permission by the Employer/Owner to enter up on its premises and lands for the purpose of such visit (upon prior approval),but only upon the express condition that the tenderer, its personnel, and agents, will release and indemnify the Employer/Owner and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss for damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- c) Before submitting the Bid, the Tenderer shall be deemed to have satisfied himself by actual inspection of the site and locality of the works, Traffic conditions/restrictions, Availability of parking space, Transportation of materials that all conditions liable to been countered during the execution of the works are taken into account and that the rates entered in the Price Bid document are adequate and all-inclusive for the completion of work to the entire satisfaction of the Employer/Owner.

6. Bid Opening

- a) Part-I of the Bid (Technical Bid) will be opened at the address and the date and time intimated in the Notice Inviting tender (NIT) mentioned in "Tender document" in presence of Tenderers or authorized representatives of Tenderers who wish to attend the opening of Bids.
- b) Bank will give advance intimation to all the technically qualified bidders about the date and time of opening of financial bids.

7. Process to be Confidential

Information relating to the examination, clarification, evaluation and comparison of bids, and recommendations for Tender shall not be disclosed to tenderers or any of their persons not officially concerned with such process until the Tender process is finalized.

8. Examination & Evaluation of Bids

- a. The Employer shall examine the bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order, and all documents as per tender document have been submitted.
- b. Prior to the detailed evaluation, Employer shall determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the tender documents. For purposes of this determination, a substantially responsive bid is one that confirms to all the documents as specified in the Tender document without material deviations, objections, Conditionality or reservation.
 - A material deviation, objection, conditionality or reservation is one;
 - That affects in any substantial way the scope, quality or performance of the contract.
 - That limits in any substantial way, inconsistent with the bidding documents, the Employers' rights or the successful Tenderer's obligations under the tender document or
 - Whose rectification would unfairly affect the competitive position of other Tenderers who are presenting substantially responsive bids.
- c. If a bid is determined to be not substantially responsive, its hall be rejected by the Employer.
- d. The bids, which are determined as substantially responsive, shall be evaluated based upon the

criteria as given in qualifying criteria.

- e. No Tenderer is permitted to canvass to Employer on any matter relating to this Bid. Any Tenderer found doing so is liable to be disqualified and his/their bid is liable to be rejected.
 - f. The Employer / consultants may visit few of the works completed / ongoing by the tenderers, whom they claim satisfying the eligibility criteria (As a part of tender process).
9. Over writing should be avoided. Correction, if any should be made by neatly crossing out, initialling, dating and rewriting. Pages of the Tender documents are numbered. Additional sheets, if any, added by the contractor, should also be numbered by him.
 10. Any information furnished by the applicant found to be incorrect either immediately or at a later date, would render him liable to be debarred from Tender / tendering /taking up of work in Indian bank. If such applicant happens to be pre-qualified/enlisted contractor, his name shall be removed from the pre-qualified list of contractors.
 11. All information called for in the enclosed forms should be furnished against the relevant columns. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a 'NIL' or 'NO SUCH CASE' entry should be made in that column. If for any particulars, Query is not applicable in case of the applicant, it should be stated as " Not Applicable". The applicants are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the applicant being rejected. Applications/Tender document submitted through Email will not be entertained. The Application/Tender document received after the due date and time of submission shall not be considered.
 12. The officials of Indian Bank & Consultants may visit any of the ongoing & completed works enlisted in Tender documents submitted by bidders and In case of misleading or false representation or Record of poor performance, abandoning work, not properly completing the contract, Penalized During work, etc. were seen/Found during the Site visit of the ongoing & completed works will be caused the disqualification of the bidder.

PROFORMA – I
GENERAL INFORMATION OF THE FIRM

| | | |
|---|--|---|
| 1 | Name of the Applicant / Firm / Organization | |
| 2 | Registered Address of the Firm <i>(Please attach address proof as supporting document as Annexure - I)</i> | |
| 3 | CONTACT DETAILS Landline No - Mobile No - FAX No - Email Id - | |
| 4 | EMD Details (i) Amount(Rs.) - (ii) Demand Draft No. - (iii) Name of the Bank - (iv) Date - <i>(Please submit EMD Details as Annexure - II. If exempted, please submit requisite proof in the form of copy of self-attested valid certification from MSME and NSIC.)</i> | |
| 5 | Tender Fees Details i. Amount (Rs)- ii. Demand Draft No iii. Name of the Bank iv. Date- | |
| 5 | Year of Establishment <i>(Enclose self certified copies of documents as evidence- Annexure -III)</i> | |
| 6 | Constitution of Firm <i>(Enclose self certified copies of documents as evidence- Annexure -IV)</i> | Sole Proprietorship /Partnership/ Private Ltd./Public Ltd / Any other(Please specify) |
| 7 | Name of the Proprietor/Partners/Directors of the Organization / Firm with Qualification <i>(Enclose self certified copies of documents as evidence- Annexure - V)</i> | |

| | | |
|----|---|--|
| 8 | Name/s of Authorized Signatory/ Directors/Partners with Designation and Contact No. | |
| 9 | Mode of Authorization <i>(Enclose self certified copies of documents as evidence- Annexure - VI)</i> | Resolution/Partnership Deed/ Registered Power of Attorney /Proprietor/Any Other (Please specify) |
| 10 | Details of Registration with Registrar of Companies/Registrar of Firms. <i>(Enclose self certified copies of documents as evidence- Annexure - VII)</i> | |
| 11 | Whether registered as MSME Organization? If so, provide the date of registration, validity & License No <i>(Enclose self certified copies of documents as evidence- Annexure - VIII)</i> | |
| 12 | Number of years of experience in this field. <i>(Enclose evidence to meet the eligibility criteria as Annexure - IX)</i> | |
| 13 | Yearly turnover of the Organization during last 3 years (Year Wise) and furnish audited Balance Sheet Statement and Profit & Loss A/c. (Audited) for the last 3 years. <i>(Enclose self certified copies of documents as evidence-Annexure - X)</i> | 2020-21: Rs..... 2021-22: Rs..... 2022-23: Rs..... Average: Rs..... |
| 14 | Banker's Details – <i>(Please attach copy of cancelled cheque as proof - Annexure - XI)</i> (i) Banker's Name: (ii) Account No.: (iii) Type of Account: (iv) IFSC : | |
| 15 | Solvency Certificate from the Bankers (Must satisfy minimum criteria as mentioned in NIT) <i>(Enclose self certified copies of document as evidence- Annexure - XII)</i> | |
| 16 | Registration with the Government Authorities <i>(Enclose self certified copies of documents as evidence-Annexure - XIII)</i> If firm is exempt from ESI & EPF registration as per extant guidelines, fill N.A. and an undertaking is to be submitted stating the same. | |

| | | |
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| | a) Income Tax (PAN) No. ii) Goods & Service Tax (GST) No. iii) Labour License iv) ESI v) EPF | |
| 17 | Whether last three years IT returns filed FY 2021-22 (AY 2021-22) FY 2021-22 (AY 2022-23) FY 2022-23 (AY 2023-24) <i>(Enclose self certified copies of IT Return – As evidence – Annexure – XIV)</i> | |
| 18 | Name & Value of Major Works Completed during the last 7 years. | <i>Please fill up the details in the format enclosed as Form - A & enclose copies of work order and satisfactory completion certificates issued by Client, etc with this tender as Annexure – XV.</i> <i>Please enclose documentary proof to satisfy minimum eligibility criteria as mentioned in NIT</i> |
| 19 | Name & Value of Major Works under execution | <i>Please fill up the details in the format enclosed as Form - B & enclose copies of work order issued or agreement signed with the Client with this tender as Annexure – XVI</i> |
| 20 | Details of Key Personnel Permanently employed. | <i>Please fill up the details in the format enclosed as Form – C and enclose the details as Annexure - XVII</i> |
| 21 | Details of Equipment owned by Company | <i>Please fill up the details in the format enclosed as Form – D and enclose the details as Annexure - XVIII</i> |
| 22 | Furnish the names of -3-responsible persons along with their designation, address, contact no., etc., for whose organization, you have completed the above-mentioned jobs and who will be in a position to certify about the quality as well as performance of your organization. | <i>Please fill up the details in the format enclosed as Form – E and enclose the details as Annexure - XIX</i> |
| 23 | Information relating to whether any litigation is pending before any Arbitrator for adjudication of any litigation or else any litigation was disposed of during the last five years by an arbitrator. If so, the details of such litigation are required to be submitted. | <i>Please fill up the details in the format enclosed as Form – F and enclose the details as Annexure - XX</i> |
| 24 | Has the applicant or any constituent partner in case of partnership firm/ Company, ever abandoned the awarded work before its completion? If so, give the name of the project and give reasons thereof. | |

| | | |
|----|--|--|
| 25 | Has the applicant or any constituent partner in case of partnership firm / Company, ever been debarred/ black listed for tendering in any organization at anytime? If so, give details Kindly submit the Self Declaration in this regard as Annexure - XXI | |
|----|--|--|

DECLARATION -

1. All the information furnished by me/us here above is correct to the best of my knowledge and belief.
2. I/We have no objection if enquiries are made about the work listed by me/ us in the accompanying sheets/annexures.
3. I/We agree that the decision of Indian Bank in selection of tenderers will be final and binding to me/ us.
4. I/We hereby confirm that our firm/agency/company has not been disqualified/debarred /blacklisted by any Governments, Semi-governments, PSUs, Banks including any of the Offices / Branch of Indian Bank Pan India during last 5 years from the date of application.
5. I/We hereby confirm that all information, particulars, copies of certificates and testimonials in connection with my/our empanelment are correct and genuine. I am / We are, therefore, liable to face appropriate actions as deemed fit by the Indian Bank in the event of any of the information, particulars, copies of certificates and testimonials are not found correct and genuine. I/We have read the instructions appended to the proforma and I/we understand that if any false information is detected at a later date, the empanelment shall be cancelled at the discretion of the Indian Bank.

PLACE -

DATE -

SIGNATURE OF CONTRACTOR

NAME & DESIGNATION -

SEAL OF ORGANISATION -



FORM - A

LIST OF MAJOR WORKS COMPLETED IN LAST 7 YEARS

| S.NO | NAME OF CLIENT | NATURE OF WORK | ESTIMATED VALUE | DATE OF START | PERIOD OF COMPLETION | DATE OF COMPLETION | FINAL VALUE OF THE PROJECT | REASONS FOR THE VARIATION (IF ANY) |
|------|----------------|----------------|-----------------|---------------|----------------------|--------------------|----------------------------|------------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| | | | | | | | | |

(Add Separate Sheet if required)

NOTE: -

- 1. The supporting documents like Work Order & Completion Certificate issued by the Clients shall be enclosed.**

Name of Authorized Signatory

Sign & seal of the applicant



FORM - B

LIST OF MAJOR WORKS UNDER EXECUTION

| S.NO | NAME OF CLIENT | NATURE OF WORK | ESTIMATED VALUE | PRESENT POSITION | SCHEDULE DATE OF COMPLETION | REMARKS IF ANY |
|------|----------------|----------------|-----------------|------------------|-----------------------------|----------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | | | | | |

(Add Separate Sheet if required)

NOTE -

1. The supporting documents like Work Order issued by the Clients shall be enclosed.

Name of Authorized Signatory

Sign & seal of the applicant



FORM - C

DETAILS OF KEY PERSONNEL (PERMANENT EMPLOYEE). GIVING DETAILS ABOUT THEIR TECHNICAL QUALIFICATION & EXPERIENCE INCLUDING THEIR IN-HOUSE ESTABLISHMENT

| S.NO | NAME | QUALIFICATION | EXPERIENCE | PARTICULARS OF WORK DONE | EMPLOYED IN YOUR FIRM SINCE | ANY OTHER INFORMATION |
|------|------|---------------|------------|--------------------------------|-----------------------------------|--------------------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

(Add separate sheet if required)‘

Notes:

1. Information has to be filled up specifically in this format.
2. Indicate other points, if any, to show your technical competence to indicate any important point in your favour .

Name of Authorized Signatory

Sign & seal of the applicant



FORM - D

DETAILS OF TOOLS PLANT AND EQUIPMENT LIKELY TO BE USED IN CARRYING OUT THE WORK (IF APPLICABLE)

| Sl. No. | Name of the Equipment/ Instrument | Nos | Capacity or Type | Age | Condition | Ownership status | | | Current location | Remarks |
|------------|--------------------------------------|-----|---------------------|-----|-----------|--------------------|--------------------|--------|---------------------|---------|
| | | | | | | Presently owned | To be purchased | Leased | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| | | | | | | | | | | |

Name of Authorized Signatory

Sign & seal of the applicant



FORM - E

DETAILS OF THREE RESPONSIBLE CLIENTS/PERSONS TO WHOM THE MAJOR WORKS CARRIED OUT BY THE APPLICANT

| S.No. | Name of the Official | Organization & Address | Contact Numbers | E-mail ID |
|-------|----------------------|------------------------|-----------------|-----------|
| | | | | |
| | | | | |
| | | | | |

(Add separate sheet if required) Notes:

1. Information has to be filled up specifically in this format.
2. Indicate other points, if any, to show your technical competence to indicate any important point in your favour.

Name of Authorized Signatory

Sign & seal of the applicant



FORM - F

DETAILS OF LITIGATION / ARBITRATION CASES RESULTING FROM THE CONTRACTS EXECUTED IN THE LAST FIVE YEARS OR CURRENTLY UNDER EXECUTION

| Year | Award for or against Applicant | Name of Client | Cause of Litigation & Matter of Dispute | Disputed Amount | Actual Awarded Amount |
|------|--------------------------------|----------------|---|-----------------|-----------------------|
| | | | | | |
| | | | | | |

(Add separate sheet if required)

Notes:

1. Information has to be filled up specifically in this format.
2. Indicate other points, if any, to show your technical competence to indicate any important point in your favour.

Name of Authorized Signatory

Sign & seal of the applicant



SOLVENCY CERTIFICATE FORMAT

This is to certify that to the best of our knowledge and information M/s.....(Firm Name) having their address at....., is a reputed firm/company with a good financial standing.

The firm/company can be treated as good up to a sum of Rs..... .(Rupees in words..... Only).

It is clarified that this information is furnished without any risk and responsibility on our part in any respect whatsoever more particularly either as guarantor or otherwise. This certificate is issued at the specific request of the customer.

Seal and Signature of Bank's Official

Note:-

1. **Solvency Certificate should be issued on letter head of the Scheduled Commercial Bank.**
2. In case of partnership firm, certificate should include names of all partners as recorded with the Bank.



**FORMAT OF WORK COMPLETION CERTIFICATE FOR WORKS MENTIONED IN FORM - A
(TO BE ISSUED ON LETTER HEAD OF ORGANIZATION)**

Date –

TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s, having their registered office at who were awarded the work of have successfully executed and completed the work as detailed below:

| | | | |
|----|--|---|---|
| 1 | Work Order No & Date | : | |
| 2 | Name of Work | : | |
| 3 | Brief Scope of Work | : | |
| 4 | Location of Work | : | |
| 5 | Value of Work as per Work Order | : | |
| 6 | Date of Commencement of Work | : | |
| 7 | Revised Value as per execution | : | |
| 8 | Completion Period | : | |
| 9 | Date of Actual Completion of Work | : | |
| 10 | Whether any Penalty / Liquidated Damages imposed. If Yes, please give the reasons | : | |
| 11 | Whether the contractor employed qualified Engineer/Overseer during execution of work | : | |
| 12 | Quality of work (indicate grading) | : | Outstanding / Very Good / Good / Satisfactory/ Poor |
| 13 | Did the contractor go for arbitration? If Yes, then : | | |
| | i) Total amount of claim | : | |
| | ii) Total amount awarded | : | |
| 14 | Comments on the capabilities of the Contractor | | Please tick one of the multiple options |
| | a) Technical Proficiency: | : | Outstanding / Very Good / Good / Satisfactory/ Poor |
| | b) Financial Soundness | : | Outstanding / Very Good / Good / Satisfactory/ Poor |
| | d) Mobilization of Man Power | : | Outstanding / Very Good / Good / Satisfactory/ Poor |
| | d) General Behavior | : | Outstanding / Very Good / Good / Satisfactory/ Poor |

Signature of Reporting Officer* with Office Seal

* Officer not below the rank of Assistant Engineer or an Officer in a equivalent or higher rank for works carried out in Government Department / PSU's, Officer not below the rank of Sr. Manager of the Concerned Department / Branch Head in PSBs. For works carried out for Private companies, Copy of TDS has to be submitted for proving the credentials/contract amount.
(Report must be submitted in Client's Official Letter Head and to be addressed to the enlistment authority: The Deputy General Manager, Indian Bank, FGM OFFICE , 17,Parliament Street Delhi.

- The experience certificate can also be in the format of issuing organization. However, the bidder should ensure that all the details sought by the bank is available in that experience certificate



FORMAT FOR SELF DECLARATION TO BE SUBMITTED ON FIRM'S LETTER HEAD

SELF DECLARATION - NO BLACKLISTING

It is hereby certified that, I/We hereby declare that presently our Company/firm _____ is having unblemished record and is not declared ineligible on account of corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/ Central Government/PSU/Autonomous Body.

We further declare that presently our Company/firm _____ is not Blacklisted/debarred and not declared ineligible for any other reasons by any State/ Central Government/PSU/Autonomous Body on the date of Bid Submission.

If this declaration is found to be incorrect then without prejudice to any other action that maybe taken, my/ our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

The Organization will immediately inform to Bank in case of any change in the situation any time here in after

Thanking you,

Yours faithfully,

(Signature of Authorized Signatory)

Name –

Designation –

Seal –

Date –

Place -



GENERAL INSTRUCTIONS TO TENDERERS

1. Time of Completion, Extension of Time & Progress Chart

Time of Completion:

The entire work is to be completed in all respects within the stipulated period of **45 days**. The work shall deem to be commenced within 7th day from the date of issue of Work order or date of handing over of site, whichever is earlier. Time is the essence of the contract and shall be strictly observed by the Tenderer.

The work shall not be considered as complete until the Engineer/Consultant have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

The contractor may plan and execute all the works around the clock without causing disturbance to the existing occupants of the premises. The plan of carrying out the works should be given at least one week in advance.

Extension of Time:

If in the opinion of the Indian Bank Engineer/Consultant, the works be delayed(a) by reason of any exceptionally inclement weather, or (b) by reason of instructions from the Indian Bank in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring owners or (c) by the works, ordelay , of other Tenderers or tradesmen engaged or nominated by the Indian Bank and not referred to in the specification or (d) by reason of authorized extra and additions or(e) by reason of any combination of strikes or lock-out affecting any of the building trades or from other causes which the Indian Bank may consider being beyond the control of the Tenderer, the Indian Bank at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect therefor. In the event of the Indian Bank failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

In case of such strikes or lockouts, as are referred to above, the Tenderer shall, immediately give the Indian Bank, written notice thereof. Nevertheless, the Tenderer shall use his best endeavours all that to prevent delay, and shall do all that may be reasonably required to the satisfaction of the Indian Bank to proceed with the works and on his doing so, it will be ground of consideration by the Indian Bank for a extension of time as above provided. The decision of the Indian Bank as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the Tenderer) shall be promulgated at the conclusion of such strike or lock-out and the Indian Bank shall then ,in the event of an extension being granted, determine and declare the final completion date. The provision with respect to payment of liquidated damages shall in such case, be read and construed as if the extended dated fixed by the Indian Bank were substituted for and the damage shall be deducted accordingly.

Progress of Work:

During the period of work execution, the Tenderer shall maintain proportionate progress on the basis of a Programme Chart submitted by the Tenderer immediately before commencement of work and agreed to by the Indian Bank Engineer / Consultants. Tenderer should also include planning for procurement of scarce material well in advance and reflect the same in the Programme Chart so that there is no delay in completion of the project.



2. Defects Liability Period (DLP)

- (a) It must be realized that this period is for exposure of “latent defects” such as settlements, shrinkages or expansion cracks, undue weathering and wear due to faulty material and workmanship.
- (b) The DLP commences from the certified date of Virtual Completion issued by the Architect.
DLP–1 year from the Date of issue of Virtual Completion Certificate for the work by Consultants.
- (c) Whenever the Indian Bank is of the view that the defects in the workmanship and/or materials used are likely to be apparent only over a long period, the Defect Liability Period may be extended as deemed fit.

3. Date of Commencement

Normally, Date of commencement shall be either **7 Days** from the Work order issued to the Tenderer or the day on which Tenderer is instructed to take possession of the site, whichever is earlier.

4. Date of Completion

Date of completion shall be 60 Days for the execution of the work.

5. Period of Final Measurement

The period of final measurement after completion shall be made taken into account the complexity of the work and staff available for carrying out measurements.

All hidden works shall have already been measured as the work progressed in presence of Tenderers, Indian Bank, Engineer and respective specialized consultants to checkup the quality and method of installation. It should be noted that unless a longer period is stipulated, the condition of contract generally lays down two months (maximum) from the date of completion of the contract as the period of final measurement. Even though the maximum period of two months is mentioned, it shall have been devoured to complete the measurements as expeditiously as possible.

6. Period of Honoring Interim Certificate

The period shall be ten days from the date of receipt of the certificate from the Architect along with measuring Book only signed by the Tenderer, Architect and Client.

7. Period of Honoring Final Certificate

The period shall be one month from the date of receipt of the final bill certificate from the Consultant along with Measuring book duly signed by Tenderer, Consultant and Client and statutory Certificates wherever necessary along with as built drawings of the works executed. No due certificate from self as well as from the sub agencies involved by the main contractor should be produced to the Bank at the time of submitting final bill by the main contractor.

8. Initial Security Deposit

The tenderer will have to deposit an amount of 2% of Contract amount in the form of Demand Draft from Scheduled Commercial Bank in India drawn in favour of “Indian Bank,” payable at New Delhi within 7 days from the date of receipt of work order as an Initial Security Deposit(ISD). The Indian Bank is not liable to pay any interest on the ISD. If the tenderer fails to provide ISD within stipulated times, it will be presumed that agency is not interested in the work and suitable action will be taken as per the tender terms.



9. Retention Money

The retention amount at 5% from the Gross value of each R/A or Final bills excluding GST. No interest will be paid on the Security Deposit under any circumstances will be held by the Indian Bank apart from ISD of 2%

10. Release of Retention Money

50% of Total security deposit will be returned on completion of following:

- After 15 days of the payment of the final bill.
AND
- Taking over certificate by Bank
AND
- Tenderer's removal of his materials, equipment, labour force, temporary sheds/stores etc. from the site. (Except for a small presence required if any for the Defect Liability Period and approved by the Indian Bank).

Balance 50% of retention money shall be released within 30 days after satisfactory completion of

Receiving, Opening and Recording of Tenders

Part-I (Technical bid) & Part-II (Price bid) has to be submitted through off –line mode only.

Part-I tender will be opened at 16:00 hours on 08/07/2024. In case of postal delivery, the tenderer has to ensure that the tender is received before the due date and time. The Indian Bank will not be responsible for the damage in transit and delay in receipt of tender if any. After technical evaluation, intimation will be given to all qualifying bidders about the date, time of opening of Price bid.



GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down here in after and, in the Drawings, the works shall be carried out as per standard specifications and under the direction of Bank /Engineer.

1. Interpretation

In construing these conditions, the specifications, the schedule of quantities, tender and Agreement, the following words shall have the meaning here in assigned to him except where the subject or context otherwise requires:

- **Indian Bank:** Indian Bank with their FGM OFFICE Delhi , 1st floor at 17,Parliament Street , New Delhi-110001
- **Tenderer:** The term 'Tenderer' shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representative(s) of such individuals or persons composing such firm or company or successors of such firm or company as the case may be and permitted assigns of such individual or firm or company.
- **Site:** The site shall mean the site where the works are to be executed including any building and erections thereon allotted by the Indian Bank for the Tenderer's use.
- **Drawings:** The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings which may be supplied or any other instruction, which may be given by the Indian Bank during the execution of the work. All drawings relating to work given to the Tenderer together with a copy of schedule of quantities are to be kept at site and the Consultants shall be given to such drawings or schedule of access whenever necessary. In case any detailed Drawings are necessary, Tenderer shall prepare such detailed drawings and or dimensional sketches there for and have it confirmed by the Indian Bank/ Consultants/PMC as case may be, prior before taking up such work.

The Tenderer shall ask in writing for any clarifications.

- i. "The Works "Shall mean the work or works to be executed or done under this contract.
- ii. "Act of Insolvency "shall mean any act as such as defined by the Presidency Towns Insolvency act or in Provincial Insolvency Act or any amending Statutes.
- iii. "The Schedule of Quantities" shall mean the schedule of quantities as specified and forming part of this contract.
- iv. "Priced Schedule of Quantities" shall mean the schedule of quantities duly priced with the accepted quoted rates of the Tenderer.

2. Tenders

a) Technical Bid

The entire set of tender paper issued to the tenderer should be submitted fully signed on the every page. Signature will indicate the acceptance of the tender papers by the tenderer.

b) Price Bid- The price should be quoted in the Price Bid format attached to this bid

The schedule of quantities shall be filled in as follows:

- (a) The " Rate" column to be legibly filled in ink both English figures and English words.
- (b) Amount column to be filled in for each item and the amount for each sub head as detailed in the "Schedule of Quantities".
- (c) All corrections are to be initialled.



No modifications, writings or corrections can be made in the tender papers by the tenderer, but may at his option offer his comments or modifications in a separate sheet of paper attached to the original tender papers.

The Indian Bank reserves the right to reject the lowest or any tender and also to discharge any or all of the tenders for each section or to split up and distribute any item of work to any specialist firm or firms, without assigning any reason.

The tenderers should note that the tender is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self-supporting. If called upon by the Indian Bank/ Consultants detailed analysis of any or all the rates shall be submitted. The Indian Bank/ Consultants shall not be bound to recognize the Tenderer's analysis. The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract, unless otherwise specified.

All items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump-sum charges in the tender in respect of any item of works, the payment of such items of work will be made for the actual work done on the basis of lump-sum charges as will be assessed to be payable by the Indian Bank.

The Indian Bank has power to add to, omit from any work as shown in drawings or described in specifications or included in schedule of quantities and intimate the same in writing but no addition, omission or variation shall be made by the Tenderer without authorization from the Indian Bank. No variation shall vitiate the contract.

3. Agreement

The successful Tenderer is required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, Incidental thereto.

4. Permits and Licenses

Permits and licenses for release of materials which are under Government control will be arranged by the Tenderer. The Indian Bank will render necessary assistance, sign any forms or applications that may be necessary.

The Indian Bank/ Engineer shall be indemnified against all Government or legal actions for theft or misuse of cement, M.S. rods and any controlled materials in the custody of the Tenderer. It may be clearly understood that no compensation or additional charges can be claimed by the tenderer for non-availability of such materials in due time on this account or according to his own requirements.

5. Government and Local Rules

The Tenderer shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc., of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The Tenderer shall give all notices required by said Act, Rules, and Regulations and Bye-laws etc., and pay all fees / fines payable to such authority / authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc., and shall indemnify the Indian Bank against such liabilities and shall defend all actions arising from such claims or liabilities.



6. Taxes and Duties

The tenderers must include in their tender prices quoted for all duties royalties, cess and sale tax or any other taxes or local charges if applicable. GST will be payable extra as applicable. No extra claim on this account will in any case be entertained. The tenderer shall keep necessary books of A/C & other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by duly authorized representative of the Indian Bank and or the Engineer-in-charge and further shall finish such other information/document as the Indian Bank may required from time to time.

7. Quantity of Work to be executed

The quantities shown in the schedule of quantities are intended to cover the entire work as indicated in the bill of Quantities but the Indian Bank reserves the right to execute only apart or the whole or any excess thereof without assigning any reason therefore. Variation in the value is however not expected to be more than 10%.

8. Other Persons Engaged by the Indian Bank

The Indian Bank reserves the right to execute any part of the work included in this contract or any work which is not included in this contract by other Agency or persons and Tenderer shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The main Tenderer shall extend all cooperation in this regard.

9. Earnest Money and Security Deposit

The tenderer will have to deposit an amount of **Rs.92,000/- (Rupees Ninety Two Thousand Only)** in the form of Demand Draft from scheduled commercial bank in India drawn in favour of "Indian Bank," payable at New Delhi.

The bidder must pay the amount of Earnest Money as mentioned in the NIT by Bank Demand Draft payable to Indian Bank. No interest on Earnest Money deposited by the bidder shall be allowed. The bidder should attach the Bank Draft along with the technical bid failing which the bid will not be considered. No other mode of payment shall be accepted. The Earnest Money Deposit of unsuccessful bidder shall be refunded within two weeks of award of contract to the successful bidder or within one week of actual commencement of work whichever is earlier and in any case not later than three months. The Earnest Money Deposit of the successful bidder shall be refunded on the acceptance by the Employer of the Contractor's Demand Draft towards Initial Security Deposit. The EMD of the bidder, whose bid is accepted, shall be forfeit in full in case he does not start the work by stipulated date mentioned in the award letter.

Apart from EMD & ISD, **the retention amount shall be deducted from progressive running bills at 5% on the gross value of each running bill paid will be held by the Indian Bank apart from ISD until the total security deposit equals 7% of project cost.**

10. Payment to contractors

- i. For claiming this payment, the following documents are to be submitted:
 - a. **R. A. Bill:** -R. A Bills payment will be released by Indian Bank within 10 days of the certification of Bill by Engineer.
 - b. **Final Bill:** -Final Bill payment will be released by Indian Bank within 30 days of the certification of final Bill by Engineer.
- ii. All the bills will be certified by the Consultant and the same will be accepted by Indian Bank.
- iii. No payment will be made without Engineer certificate.

11. Tenderer to provide everything necessary

The Tenderer shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the Tenderer finds any discrepancies therein he shall immediately and in writing, refer the same of the Indian Bank/ Consultants whose decision shall be final and binding.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items of work within the contemplation of the contract, and beyond the unit price no extra payment will be allowed for incidental or contingent work, labour and/or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in the tender documents.

The Tenderer shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles, machineries and equipments and all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection for the public and safety of any adjacent roads, streets, walls, houses, buildings, all other erections, matters and things and the Tenderer shall take down any remove any or all such centering, scaffolding, planking, timbering, strutting, shoring, etc, as occasion shall be required or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the execution of the works to the satisfaction of the Indian Bank Engineer/Consultants.

The Tenderer shall at all times give access to workers employed by the Indian Bank or any men employed on the buildings and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc., in any work, where directed by the Indian Bank as may be required to enable such workmen to lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of the tenderers shall accordingly include all these above mentioned contingent works.

12. Tools, Storage of Materials, Protective Works and Site Office Requirements

The Tenderer shall maintain as its office with site engineer to receive instruction notices or communications etc. All drawings/charts maintained on the site are to be carefully mounted on boards of appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants, and other insects.

The Tenderer shall provide at his own cost all artificial light required for the work and to enable other Tenderers and sub-Tenderers to complete the work within the specified time.

The Tenderer shall use the toilets identified by the Indian bank for use of their workmen and keep the same in a clean and sanitary condition to the satisfaction of the Indian bank / Public Health Authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the works disturbed by these conveniences.

Every precaution shall be taken by the Tenderer to prevent the breeding of mosquitoes on the works during the construction, and all receptacles; cisterns, water tanks etc., used for the storage of water must be suitably protected against breeding of mosquitoes.

The Tenderer shall indemnify the Indian Bank against any breach of rules in respect of anti-malarial measures.



The Tenderer shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry, building structure other than those approved by the Indian Bank.

- a) **Protective Measures:** The Tenderer from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays. Tenderer shall indemnify the Indian Bank against any possible damage to the building, roads, or members of the public in course of execution of the work. The Tenderer shall provide necessary temporary enclosures, gates, entrances, etc., for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.
- b) **Storage of materials:** The Tenderer shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that may be executed on the site including the tools and materials of sub-Tenderers and remove same on completion.
- c) **Tools:** The theodolite levels, steel and metallic tapes and all other surveying instruments found necessary on the works shall be provided by the Tenderer for the due performance of this contract as instructed by the Site Engineer. All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for safely taking measurement shall be supplied by the Tenderer.

The masteries and the supervisors on the works shall carry with them always a one meter or two meter steel tape, a measuring tape of 3 meters, a spirit level, a plumb bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the Tenderers as he chooses for checking the works executed or being executed on the contract. The Tenderer should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc. by sub-Tenderers for their work.

13. Notice and Patents of Appropriate Authority and Owners

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

14. Clearing Site and Setting out Works

The site shown on the plan shall be cleared of all obstructions, loose stone, and materials rubbish of all kinds. All holes or hollows whether originally existing or produced by removal of loose stone or materials shall be carefully filled up with earth well rammed and leveled off as directed at his own cost. The Tenderer shall set out the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the Tenderer shall at his own expenses rectify such error, if called upon to the satisfaction of the Indian Bank. The Tenderer shall further set out the works to the alternative positions at the site until one is finally approved and the rates quoted in his tender should include for this and no extra on this account will be entertained.

15. Tenderer Immediately to Remove All Offensive Matters

The Tenderer shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power- driven pumps and other plant to the satisfaction of the Indian Bank for the purpose, until the building is handed over to the Indian Bank. The Tenderer shall arrange for the disposal of the water so accumulated to the satisfaction of the Indian Bank and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

16. Access

Any authorized representative of the Indian Bank shall at all reasonable times have free access to the works and/or to the, workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the Tenderer shall give every facility to the Indian Bank or their representatives necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the Indian Bank, no person shall be allowed at any time without the written permission of the Indian Bank.

17. Materials, Workmanship, Samples, Testing of Materials

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workman like manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Indian Bank/Consultants during the execution of the work, and to his entire satisfaction.

If required by the Indian Bank /Consultants the Tenderer shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the Indian Bank /Consultants at his own cost to prove that the materials etc. Under test conform to the relevant I.S. Standards or as specified in the specifications.

All the materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the Tenderers must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workman like manner. Samples of all materials to be used must be submitted displayed to the Indian Bank/ Consultants when so directed by the Engineer/ Consultants and written approval from Indian Bank/ Consultants must be obtained prior to placement of order.

The Tenderer shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the work whether by himself or special tradesmen or sub-Tenderer and any damage caused must be made good by the Tenderer at his own expenses.

18. Removal of Improper Work

The Indian Bank shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Indian Bank / Consultants are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanships not in accordance with the drawings and specifications or instructions. In case the Tenderer refuses to comply with the order the Indian Bank shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental there



to as certified by the Indian Bank/ Consultants shall be borne by the Tenderer or may be deducted from any money due to or that may become due to the Tenderer. No certificate which may be given by the Consultant / Architect shall relieve the Tenderer from his liability in respect of unsound work or bad materials.

19. Site Engineer/Project Management Consultant:

The term "Site Engineer/PMC" shall mean the person/agencies appointed and paid by the Indian Bank to superintend the work. The Tenderer shall afford the Site Engineer/PMC every facility and assistance for examining the works and materials and for checking and measuring work and materials. The Site Engineer/PMC shall have no power to revoke, alter, enlarge or relax any requirements of the Tenderer 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 Indian Bank.

The Site Engineer/PMC shall have power to give notice to the Tenderer or to his foreman, 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 the Indian Bank is obtained. The work will from time to time be examined by the Consultants, Engineer from the Premises Department of the Indian Bank and the Site Engineer if any. But such examination shall not in any way exonerate the Tenderer from the obligation to remedy any defects which may be found to exist at any stage of the work or after the same is complete. Subject to the limitations of this clause the Tenderer shall take instructions only from the Consultants/Indian Bank or his representative.

20. Tenderer's Employees

The Tenderer shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the working hours to receive and comply with instructions of the Indian Bank/ Consultants. The Tenderer shall engage at least one experienced Engineer as site-in-charge for execution of the work. The Tenderer shall employ in connection with the work persons having the appropriate skill or ability to perform their job efficiently. The Tenderer shall employ local labourers on the work as far as possible. No labourer below the age of eighteen years and who is not an Indian National shall be employed on the work.

Any labourer supplied by the Tenderer to be engaged on the work on day-work basis either wholly or partly under the direct order or control of the Indian Bank or his representative shall be deemed to be a person employed by the Tenderer.

The Tenderer shall comply with the provisions of all labour legislation including the requirements of

- a) The Payment of Wages Act 1936
- b) Indian Bank's Liability Act 1938
- c) Workmen's Compensation Act Contract Labour (Regulation & Abolition) Act, 1970 and Central Rules 1971.
- d) Apprentices Act 1961
- e) Minimum Wages Act 1948
- f) Any other Act or enactment relating thereto and rules framed there under from time to time.

The Tenderer shall keep the Indian Bank saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Indian Bank in connection with any claim that may be made by any workmen.

The Tenderer shall comply at his own cost with the order of requirement of any Health Officer of the State or any local authority or of the Indian Bank regarding the maintenance of proper environmental sanitation of the area where the Tenderer's laborers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The Tenderer shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the Tenderer to prevent nuisance of any kind on the works or the lands adjoining the same.



The Tenderer shall arrange to provide first-aid treatment to the labourers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Indian Bank and also to the Competent Authority where such report is required by law.

21. Dismissal of Workmen

The Tenderer shall on the request of the Indian Bank immediately Withdrawal / remove from works any person employed thereon by him, who may in the opinion of the Indian Bank be unsuitable or incompetent or who may misconduct himself. Such Withdrawal/Remove shall not be the basis of any claim for compensation or damages against the Indian Bank or any of their officer or employee.

22. Assignment

The whole of the works included in the contract shall be executed by the Tenderer and the Tenderer shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Indian Bank and no subletting shall relieve the Tenderer from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

23. Damage to Persons and Property Insurance Etc.

- a) The Tenderer shall be responsible for all injury to the work or workmen to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-Tenderer or of any of his or a sub-Tenderer's employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include inter-alia, any damage to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, footpaths or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind or other inclemency of the weather. The tenderer is also responsible for the damages/injury/accidents caused to any public in general/vehicles in general and pay necessary compensation or settlement or whatsoever in this regard.
- b) The Tenderer shall indemnify the Indian Bank and hold harmless in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.
- c) The Tenderer shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property or third parties.
- d) The Indian Bank shall be at liberty and is hereby empowered to deduct the amount of any damages compensations, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums due or to be become due to the Tenderer.

24. Insurance

- a) The Tenderer shall arrange to take "Tenderers all risk insurance policy including third party liability", covering the entire period of contract till virtual completion of the contract (including extended period if any) for the entire scope of works for a risk cover not less than the contract value. The third party insurance shall be for a sum of **Rs.1Lakh** per accident.
- b) The Tenderer shall effect the insurance necessary and indemnify the Indian Bank entirely from all responsibility in this respect. The insurance must be placed with a company approved by the Indian Bank and must be effected jointly in the name of the Tenderer and the Indian Bank and the



policy lodged with the latter. The scope of insurance is to include damage or loss to the work and workman due to carelessness accident, including fire, earthquake and floods etc., damage or loss to the contract itself till this is made over in a complete state. Insurance is compulsory and must be effected from the very initial stage.

- c) The Tenderer shall also be responsible for anything which may be excluded from damage to any property arising out of incidents ,negligence or defective carrying out of this contract. Unless otherwise instructed the Tenderer shall insure the works and keep them insured until the virtual completion of the contract against loss or damage by fire and /or earthquake, flood. The insurance must be placed with a company approved by the Indian Bank, in the joint names of the Indian Bank and the Tenderer for such amount and for any further sum if called to do so by the Indian Bank, the premium of such further sum being allowed to the Tenderer as an authorized extra.
- d) The Tenderer shall as soon as the claim under the policy is settled or the work reinstated by the Insurance Company should they elect to do so, proceed with due diligence with the completion of the works in the same manner as though the fire has not occurred and in all respects under the conditions of the contract. The Tenderer in case of rebinding or reinstatement after fire shall be titled to extension of time for completion as the Indian Bank may deem fit.

25. Accounts, Receipts & Vouchers

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

26. Measurement

All the Measurements should be taken in the presence of Bank officials/ Consultants. And the measurements shall be countersigned by the Bank officials.

27. Payments

- a) All bills shall be prepared by the Tenderer in the form prescribed by the Indian Bank Engineer/Consultants. **Normally the interim bill shall be prepared subject to achieving the minimum bill value of Rs. 15Lakhs.** The bills in proper forms must be duly accompanied by detailed measurements in support of the quantities of work done and must show deductions for all previous payments, retention money, etc.
- b) The Indian Bank/ Consultant shall issue a certificate after due scrutiny of the Tenderers 'bill stating the amount due to the Tenderer from the Indian Bank and the Tenderer shall be titled to payment thereof, within the period of honoring certificates named in these documents. In case of delay due to some reasons in the processing of such bills for payment, an advance of 75% of the billed Amount may be paid on the request of the Tenderer for the smooth progress of the work. The amount stated in an interim certificate shall be the total value of work properly executed and 75% of invoiced value of material brought to site for permanent incorporation into the work up to the date of the bill less the amount to be retained by the Indian Bank as retention money vide clause 9 of the Special Instructions To Tenderers, less TDS ,and less installments previously paid under these conditions, provided that such certificate shall only include the value of said material and goods as and from such time as they are reasonably, properly and not prematurely brought to or placed adjacent to the work and then only if adequately protected against weather or other causalities.



- c) The Indian Bank will deduct retention money as per tender conditions. If the Indian Bank has supplied any materials or goods to the Tenderer, the cost of any such materials or goods will be, progressively deducted from the amount due to the Tenderer in accordance with the quantities consumed in the work.
- d) All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually, done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Indian Bank under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Tenderer within one month of the date fixed for completion of the work or of the date of certificate of completion furnished by the Site Engineer and payment shall be made after checking the work completely.
- e) Indian Bank reserves the right to with hold in part or full payment of bills in case of non-compliance/ Violation of any terms and conditions stipulated in the agreement. The tenderer shall neither suspend the work nor claim for extension of time for nonpayment /withholding of payment on this account and no interest is also payable on the payment withheld / due.

28. Final Payment

The final bill shall be accompanied by a certificate of completion from the Architect & Payments of final bill shall be made after deduction of Retention Money, which sum shall be refunded after the completion of the Work and Defects Liability Period as mentioned in the Clause No 10 of Special Instructions to Tenderers after receiving the Indian Bank's/Consultants 'certificate that the Tenderer has rectified all defects to the satisfaction of the Indian Bank/Consultants. The acceptance of payment of the final bill by the Tenderer would indicate that he will have no further claim in respect of the work executed.

The contractor has to submit Photographs of Work executed & duly certified by the Consultant to the Bank along with final bill documents. Along with Every bill the contractor has to submit the photographs of the work executed.

29. ENHANCEMENT IN RATES AND QUANTITY VARIATION

The tender rates shall be fixed, firm and applicable for any increase or decrease in the tendered quantities. The Employer / Consultant can increase or decrease any quantities to any extent or even delete particular item as per the site requirements and the contractor shall not be paid anything extra on this account. Nothing extra will be paid by the Indian Bank on account of omission /deletion of items or decrease in the quantity of items. The Bank shall not entertain any claim whatsoever from the contractor on this account. The price of all additional items / non-tendered items will be worked out on the basis of rates quoted for similar items in the contract wherever existing. If similar items are not available, the rates for such items will be derived as per standard method of rate analysis based on prevalent fair price of labour, material and other components as required with 15% towards contractor's profit and overheads.

30. UNQUOTED ITEMS

The bidders to offer their competitive rates for each and every item listed in the Schedule of rates, the bidders who have not quoted for all the items as required in the SORs shall be liable for rejection. In case a bidder who has left certain items unquoted and if they happen to be over all lowest on evaluation, then their offers shall be considered subject to the unquoted items being taken as NIL cost. The bidder shall also give a clear undertaking to the effect that they shall execute the said items (unquoted) free of cost. In the event the bidder refuses the above conditions and insists on additional

cost for the unquoted items, then such an offers shall be rejected as invalid. For Extra works at the time of work in progress the contractor should submit the reasonable rate with the rate analysis and after approval given by the Consultant/Bank that amount will be given.

31. ABNORMAL RATES

The Contractor is expected to quote rate for each item after careful analysis of costs involved for the performance of the complete item consisting all specifications and conditions of the contract. If it is noticed that the rates quoted by the tenderer for any items are unusually high (or) unusually low it will be sufficient cause for rejection of the tender unless the owner is convinced about the reasonableness of the rate on scrutiny of the analysis for such rate to be furnished by the tenderer on demand. Not with standing anything there in stand, the rate once accepted by the owner shall be final and shall not be subject to any claim either on account of un-workability of rates or on any other ground whatsoever.

32. SUBSTITUTION

Should the Tenderer desire to substitute any materials and workmanship, he/ they must obtain the approval of the Indian Bank/Consultants in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equal "or "Other approved" etc. Specific approval of the Indian Bank/Consultants has to be obtained in writing.

33. Preparation of Building Works for Occupation and Use on Completion

The whole of the work will be thoroughly inspected by the Tenderer and deficiencies and defects put right .On completion of such inspection the Tenderer shall inform the Indian Bank that he has completed the work and it is ready for inspection. On completion the Tenderer shall clean all windows and doors including the cleaning and oiling if necessary ,of all hardware, inside and outside, all floors, stair-cases, and every part of the building. He will leave the entire building neat and clean and ready for immediate occupation and to the satisfaction of the Indian bank.

34. Clearing Site on Completion

On completion of the works the Tenderer shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workman like condition to the satisfaction of the Indian Bank/Consultants. The main/Principal contract or is only responsible for the cleanliness of the site/building irrespective of numbers of sub agencies deployed by them to carryout various other works in the tender.

35. Defects after Completion

The Tenderer shall make good at his own cost and to the satisfaction of the Indian Bank all defects, shrinkage, settlements or other faults which may appear within 12 months after completion of the work. In default the Indian Bank may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental there to shall be made good and borne by the Tenderer and such damages, loss and expenses shall be recoverable from him by the Indian Bank or may be deducted by the Indian Bank, in lieu of such amending and making good by the Tenderer, deduct from any money due to the Tenderer a sum equivalent to the cost of amending such work and in the event of the amount retained being in sufficient, recover that balance from the Tenderer from the amount retained under General Rules and instruction General Condition of Contract Clause 28 together with any expenses the Indian Bank may have incurred in connection therewith.

36. Escalation

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



37. Idle Labour

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

38. Suspension

If the Tenderer except on account of any legal restraint upon the Indian Bank preventing the continuance of the work or in the opinion of the Indian Bank shall neglect or fail to proceed with due diligence in the performance of his part of the contract if he shall more than once make default, the Indian Bank shall have the power to give notice in writing to the Tenderer requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the Tenderer shall not be a liberty to remove from the site of the works or from any ground contiguous there to any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the Tenderer fails to start the work within seven days after such notice has been given to proceed with the works as there in prescribed, the Indian Bank may proceed as provided in clause 39 (Termination of Contract by Indian Bank).

39. Termination of Contract by Indian Bank

If the Tenderer being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated insolvent or shall make an assignment or a composition for the benefit of the greater Part, in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the Official Assignee in insolvency, or the Receiver of the Tenderer in insolvency, shall repudiate the contract, or if a Receiver of the Tenderer's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Indian Bank that he is able to carry out and fulfill the contract, and if so required by the Indian Bank to give reasonable security therefore. or if the Tenderer shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the Tenderer, or shall assign, charge or encumber this contract or any payments due or which may become due to the Tenderer, thereunder, or shall neglect or fail to observe and perform all or any of the acts matters of things by this contract, to be observed and performed by the Tenderer within three clear days after the notice shall have been given to the Tenderer in manner herein after mentioned requiring the Tenderer to observe or perform the same or shall use improper materials or workmanship in carrying on the works, or shall in the opinion of the Indian Bank not exercise such due diligence and make such due progress as would enable the work to be completed within due time agreed upon, and shall fail to proceed to the satisfaction of the Indian Bank after three clear days notice requiring the Tenderer so to do shall have been given to the Tenderer as herein after mentioned, or shall abandon the contract, then and in any of the said cases, the Indian Bank may notwithstanding previous waiver determine the contract by a notice in writing to the effect as herein after mentioned, but without thereby effecting the powers of the Indian Bank of the obligations and liabilities of the Tenderer the whole on which shall continue in force as fully as if the Contract, had not been so determined and as if the works subsequently executed had been executed by or on behalf of the Tenderer (without thereby creating any trust in favour of the Tenderer) further the Indian Bank or his agent, or servants, may enter upon and take possession of the work and all plants, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads and sell the same as his own property or may employ the same by means of his own servants and work men in carrying on and completing the works or by employing any other Tenderers or other persons or person to complete the works, and the Tenderer shall not in any way interrupt or do any act, matter of thing to prevent or hinder such other Tenderers or other persons or person employed from completing and finishing or using the materials and plants for the works when the works shall be completed, or as soon thereafter as conveniently may be, the Indian Bank shall give notice in writing to the Tenderer to remove his surplus materials and plants and should the Tenderer fail to do so within a period of 14 days after receipt by him the Indian Bank may sell the same by Public Auction and shall give credit to the Tenderer for the amounts so realized. Any



expenses or losses incurred by the Indian Bank in get the works carried out by other Tenderers shall be adjusted against the amount payable to the Tenderer by way of selling his tools and plants or due on account of work carried out by the Tenderer prior to engaging other Tenderers or against the Security Deposit.

40. Force Majeure

- (a) Notwithstanding the provisions of Terms and Conditions of Contract (TCC), the successful bidder shall not be liable for forfeiture of his EMD/ISD/ASD, liquidated damages, or termination for default if and to the extent that the delay in performance or other failure to perform its obligations under the Contract, is the result of an event of Force Majeure.
- (b) For purposes of this clause, "Force Majeure" means an event beyond the control of the successful bidder and not involving the successful bidder's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of INDIAN BANK in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- (c) If a Force Majeure situation arises, successful bidder shall promptly notify INDIAN BANK in writing of such condition and the cause thereof. Unless otherwise directed by INDIAN BANK in writing, the successful bidder shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

41. Arbitration

- a) All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of this contract or the rights touching or concerning the works or the execution of maintenance thereof of this contractor the construction remaining operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation there to whether during or after determination foreclosure or branch of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Indian Bank hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as herein after provided.
- b) For the purpose of appointing the sole Arbitrator referred to above, the Indian Bank will send within thirty days of receipt of the notice, to the Tenderer a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed.
- c) The Tenderer shall on receipt of the names as aforesaid, select any one of the person's name to be appointed as a sole Arbitrator and communicate his name to the Indian Bank with in thirty days of receipt of the names. The Indian Bank shall there upon without any delay appoint the said person as the Sole Arbitrator. If the Tenderer fails to communicate such selection as provided above within the period specified, the Competent Authority shall make the selection and appoint the selected person as the Sole Arbitrator.
- d) If the Indian Bank fails to send to the Tenderer the panel of three names as foresaid with in the period specified, the Tenderer shall send to the Indian Bank a panel of three names of persons who shall all be unconnected with either party. The Indian Bank shall on receipt of the named as aforesaid select any one of the persons names and appoint him as the Sole Arbitrator .If the Indian Bank fails to select the person and appoint him as the Sole Arbitrator within 30 days of receipt of the panel and inform the Tenderer accordingly, the Tenderer shall be entitled to appoint one of the persons from the panel as the Sole Arbitrator and communicate his name to the Indian Bank.
- e) If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid. The work under the Contract shall, however, continue during the ,arbitration proceedings and no payment due or payable to the Tenderer shall be with held on account of such proceedings. The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both



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

- f) The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute, in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be in Kanpur only as maybe fixed by the Arbitrator in his sole discretion.
- g) The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published ,be paid half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of costs to be so paid. The award of the Arbitrator shall be final and binding on both the parties.
- h) Subject to aforesaid the provisions of the "Arbitration and Reconciliation Act 1996 "or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.
- i) The Indian Bank and the Tenderer hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration. The arbitration proceedings will not prejudice the right of approaching legal forum by the parties.

42. LIQUIDATED DAMAGES

- i. Should the work be not completed to the satisfaction of the Bank /Consultants within the stipulated period, the contractor shall be bound to pay to the Bank a sum calculated as given below by way of liquidated damages and not as penalty during which the work remains uncompleted or unfinished after the expiry of the completion date.
- ii. The work should complete on time or as mentioned elsewhere. If the contractor fails to complete the job within the stipulated time, he will bear the cost of penalty @1% of contract value Per Week till completion of work after the scheduled time period. The maximum limit of the penalty amount is restricted to 10% of the total value of the jobs.

43. LIMITATION OF LIABILITY

- i. For breach of any obligation mentioned in this agreement, subject to obligations mentioned in this clause, in no event successful bidder shall be liable for damages to Bank arising under or in connection with this agreement for an amount exceeding the value of this agreement. Successful bidder will ensure Bank/Consultant confidentiality and shall be responsible for liability arising in case of breach of any kind of security and/or leakage of confidential customer/Bank's related information to the extent of loss so caused.
- ii. The limitations set forth herein shall not apply with respect to:
 - a) Claims that are the subject of indemnification pursuant to IPR infringement,
 - b) Damage (s) occasioned by the gross negligence, fraud or willful misconduct of successful bidder
 - c) Damage (s) occasioned by successful bidder for breach of Confidentiality Obligations,
 - d) When a dispute is settled by the Court of Law in India.
 - e) Loss occasioned by Non-compliance of Statutory or Regulatory Guidelines.

SAFETY CODE AND MODEL RULES

1. Safety Measures

- a) All people working shall be provided with safety helmets, safety shoes, goggles, gloves, Safety belts, etc., which shall be worn by the workmen while performing work and people working at elevation more than 10 feet shall be always provided with safety belts at contractor's cost. The safety belts shall be properly fixed to a lifeline always while at work.
- b) The Contractor shall provide safe means of access to any working place including provisions of suitable and sufficient scaffolding at various stages during all operations of the work for the safety of his workmen.
- c) Contractor shall ensure deployment of appropriate equipment and appliances for adequate safety and health of the workmen and protection of surrounding areas.
- d) The Contractor shall ensure that all their staff and workers including their sub-contractor (s) shall wear Safety Helmet and Safety Shoes. Contractor shall also ensure use of safety belt, Protective goggles, gloves etc. by the personnel as per job requirements.
- e) Contractor shall ensure that a proper Safety Net System and shall be used at appropriate locations. The safety net shall be located not more than feet (9.0meters) below the working surface at site to arrest or to reduce the consequences of a possible fall of persons working at different heights.
- f) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

2. Personal Safety Equipments:

All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the Tenderer should take adequate steps to ensure proper use of equipment by those concerned.

- a) Those engaged in welding works shall be provided with welder's protective eyesight lids.
- b) Stonebreakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- c) When workers are employed in sewers and manholes, which are in use, the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
- d) The contractor shall not employ men below the age of 18 years. Women of any age shall not be engaged for the work of painting with products containing lead in any form. Whenever men above the age of 18 years are employed on the work of lead painting the following precautions should be taken.
- e) Suitable facemasks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scraped.
- f) Overalls shall be supplied by the contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- g) When the work is done near any public place where there is risk of accidents all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

3. **Scaffolds**

- a) Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration work, which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450 mm and a maximum rise of 300 mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
- b) Scaffolding or staging more than 4 m. above the ground floor, swung or suspended from an overhead support or erected with sanitary support shall have a guard rail properly bolted, braced or otherwise secured, at least 1 m. above the floor or platform of such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- c) Working platforms, gangways and stairways shall be so constructed that they do no sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 m. above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced.
- d) Every opening in the floor of a building or in a working platform with suitable means to prevent the fall of persons or materials or railing whose minimum height shall be 1.00m. Whenever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.
- e) Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m. in length while the width between side rails in rung ladder shall in no case, be less than 290 mm, for ladder up to and including 3 m. in length. For longer ladders this width shall be increased at least 20 mm for each additional meter of length.
- f) A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to construction.

4. **Demolition**

- a) Before any demolition work is commenced and also during the process of the work.
- b) All open areas adjacent to the work site shall either be closed or protected.
- c) No electric cable or apparatus, which is liable to be a source of danger over a cable or apparatus used by the operator, shall remain electrically charged.
- d) All practical steps shall be taken to prevent danger to persons employed from the risk so over loaded with debris or materials as to render it unsafe.

5. **Hoisting Machines**

- a) Use of hoisting machines and tackle including their attachments anchorage and supports shall conform to the following standards or conditions.
- b) These shall be of good mechanical constructions, sound materials and adequate strength and free from patent defect and shall be kept in good working condition with necessary preventive maintenance
- c) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.
- d) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be anchorage of any hoisting machine including any scaffolding without signals to operator.
- e) In case of every hoisting machine and of every chain ring hook, shackle shovel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load, each safe working load and the conditions under which it is

applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

- f) In case of department machines, the safe working load shall be notified by the Engineer. As regards contractor's machines, the contractor shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get it verified by the Engineer concerned.
- g) Motors, gearing transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduced to minimum of risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mats, wearing apparel such as gloves, sleeves and boots as may be necessary, should be provided. The workers should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.
- h) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided near the place of work.
- i) All the Indian Electricity rules 1956 on Electrical Safety should be strictly followed while execution of the Electrical works.
- j) These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- k) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineers of the Department or their representatives.
- l) Notwithstanding the above clause there is nothing in these to attempt the contractor from the operation of any other Act or Rule in force in the Republic of India.

6. **First Aid**

At every workplace, there shall be maintained in readily accessible place ,first aid appliance including adequate supply of sterilized dressings and sterilized cotton wool. The appliance shall be kept in good order and in large work place, they shall be placed under the charge of a responsible person who shall be readily available during working hours.

7. **Electricity & Water**

- a) All the water and their arrangement for work execution shall be provided by contractor at own cost, only required electricity will be provided by INDIAN BANK, all the necessary arrangement for electricity point i.e. cable, switch etc. shall be provided by contractor. Before starting the work the contractor has to submit the BAR-CHART and it is to be approved by the Consultant/Client.
- b) The Contractor is directly responsible for any accident, injury, disableness and other such things that may happen to his workmen during working hours or outside working hours if they happen to be in the work site and that he will pay adequate compensation to such people. And the contractor has to take the full responsibility for these disabilities.
- c) The Contractor will be responsible for any accident or untoward incident that may happen to any person in the work site or near about due to inadequate safely measures, carelessness, negligence, incorrect procedures, inadequate supervision, improper methods, and that he will attend to all related police enquiry, court attendance and will bear the cost for all such expenses including compensation, if any, to be paid.



SPECIAL CONDITIONS OF THE CONTRACT

1. DRAWINGS AND SPECIFICATIONS

The works shall be carried out to the entire satisfaction of the EMPLOYER and the Architect / Consultant, in accordance with the signed drawings and specifications and such further drawings and details as may be provided by the Consultant, and in accordance with such written instructions, directions and explanations as may from time to time be given by the Consultant, whose decision as to the sufficiency and quality of the work and materials shall be final and binding upon all parties. If the work shown on any such further drawings or work that may be necessary to comply with any such instructions directions or explanations, be in the opinion of the contractor extraction that comprised in or reasonably to be inferred from the contract he shall before proceedings with such work, give notice in writing to this effect to Consultant, and in the event of the Consultants/employer agree to the same in writing the contractor shall be entitled to an allowance in respect of such extra work as on authorized extra. If the Consultant and the contractor fail to agree as to whether or to there is an extra, then, if the Consultant decided that the contractor is to carry out the said work, the contractor shall do so, and the question whether or not there is any extra, and it so the amount thereof, shall failing agreement, be settled by Arbitration as herein after provided, but such references shall in no way delay the fulfillment of this contract.

No drawings shall be taken as in itself on order for variation unless, in addition to the Consultant's signature, it bears express words stating that is intended to be such an order or bears a remark '**VALID FOR EXECUTION**'. No claim for payment for extra work shall be allowed.

One complete set of the signed drawings and specification and scheduled of quantities shall be furnished by the Consultant to the Contractor. The Architect / Consultant shall furnish within such time, as he may consider reasonable, one copy of any additional drawing, which is his opinion, may be necessary for the execution of any part of work. Such copies shall be kept at the works, and the Consultant or his representatives shall, at all reasonable time have access to the same and shall be return to the Architect / Consultant by the Contractor before the issue of the Final certificate.

2. INSPECTION OF DRAWINGS

Before filling in the tender, the contractor will have to check up all drawings and schedule of quantities, and will have to get an immediate clarification from the Engineer / Consultant / Bank on any point that he feels is vague or uncertain. No claim of damages or compensation will be entertained on this account.

3. EXECUTION OF WORK (PRICES TO INCLUDE)

The whole of the work is described in the contract (including the schedule of Quantities, the specifications and all drawing pertaining there to) and as advised by Bank / Consultant from time to time is to be carried out and completed in all its parts to the entire satisfaction of the Bank /Consultant. Any minor details of the work which may not have been definitely referred to in this contract, but which are usual in practice and essential to the work, are deemed to be include in this contract.. GST as applicable will be paid extra over and above quoted rates. Deductions in respect of sales tax or turnover levied as per government notification and/or guidelines shall be made from the Contractor's interim and final bills, and deposited with the relevant authority by the Bank, on his behalf. Any shortfall in deposit thereof shall be made up by the contractor, before submitting his final bill

The rates quoted in the tender should include all charges for:

- Labor, maintenance fixing, carrying, cleaning, making good, hauling, watering etc

- Plant, machinery, scaffolding, framework, English ladders, ropes, nails, spikes, tools, materials and workmanship protection from weather, shuttering, temporary supports, platform and maintenance of the same.
- Covering for the walling and other works during inclement weather or striking or whenever directed as necessary.

4. **SITE SUPERVISION**

The contractor shall appoint at his own cost competent and adequate number of qualified Engineers at site, for (1) joint measurements and preparations of bills, (2) for testing materials at site and outside laboratory, (3) for other general supervision. Their appointment may be consulted with Bank/Consultant. The site Engineers shall not be removed from the site without the written consent of the Employer/Consultant.

5. **MATERIALS AND WORKMANSHIP**

The contractor under this contract binds himself to use first class materials. Quality of workmanship shall be of the highest order befitting the nature of the project. All work not up to the standard shall be summarily rejected and the Contractor will be required to dismantle the defective work and redo the work at his own cost and risk. The decision of the Bank regarding the quality/ standard of workmanship shall be final and binding on the contractor.

6. **DIMENSIONS**

Figures, dimensions, are in all case to be accepted preferences to scaled sizes. Large- scale details take precedence over small-scale drawings. In case of discrepancy, the contractor is to ask for a clarification before proceeding with the work. Accordingly, if any work is executed without prior clarification, it is liable to be rejected and shall not be paid for.

7. **PROCUREMENT OF MATERIALS**

Contractor shall procure all the materials for the work from the open market. Time is the essence of the contract. Acceptance of the completion date by the contractor shall mean that he has taken in to consideration the availability of all material of approved make and quality in sufficient quantities at site to enable him to complete the entire work in the stipulated period.

Contractor will get sample of all materials approved by the Employer / Consultant before placing order /purchase/ procurement. They shall conform to I.S.codes and or tender specification as applicable.

For all materials the contractor shall quote for the best quality of the materials of best make / source or supply and it will be got approved by Employer / Consultant before procurement.

In case sufficient quantities of approved quality materials from approved source are not available in time, contractor may have to procure the same for neighboring area with longer leads as required and directed at no extra cost. The material will be, however as per relevant I.S code as and wherever applicable.

8. **UNFIXED MATERIALS**

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

9. **CUSTODY AND SECURITY OF MATERIALS**

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

10. **RATES**

Contractor shall quote all the rates both in figures and in words and any alterations shall have to be initiated by the contractor. Rates quoted by the contractor for the same item in different schedules will be same and in case different rates are quoted, the lowest will be taken as correct and the schedule corrected accordingly. In case of discrepancy between figures and the words the rate quoted in words shall be taken as correct one. Rates quoted by the contractor shall hold good for all the work carried out to any height and depth as required and directed by the Consultant. Rates quoted by the contractor shall also hold good for any small work at any place at site.

11. **PRICES FOR EXTRAS, ETC**

The work or extra items shall be started only after the approval of extra items rates by client / Consultant. Rates for additional or extra items of construction work, which can be derived from the contract item rates and are not covered in the contract, shall be calculated on the basis of actual cost plus 15 % for profit plus applicable GST.

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

The measurements and valuations in respect of the extra items of contract shall be completed within the 'period of final measurement'.

12. **CONSULTANT'S DRAWINGS AND INSTRUCTIONS**

A set of major drawings along with the contract documents shall be provided to the contractor. For any clarifications or further drawings are required by the contract, during or before the start of construction work, the Contractor shall inform the Architect / Consultants in writing to provide the same. Working details will be given to the contractor from time to time during the progress of work as and when required. In case of other drawing is required by the contractor he will give a minimum 3 days' notice to the Employer / Consultant.

13. **FAILURE BY CONTRACTOR COMPLY WITH CONSULTANT EMPLOYER'S INSTRUCTIONS**

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

14. **INFORMATION TO BE SUPPLIED BY THE CONTRACTOR**

The contractor shall furnish the Employer / Consultant the following:

- (a) Detailed industrial statistics regarding the labor employed by him etc.
- (b) The Power of Attorney, name and signature of his authorized representative who will be in
- (c) Charges for the execution of work.
- (d) List of technically qualified persons employed by him for the execution of this work.
- (e) The total quantity and quality of materials used for the works.
- (f) The list of plant and machinery employed for this work.

14. **CONSULTANT'S DELAY IN PROGRESS**

The Architect/ Consultant may delay the progress of the works in case of rains or otherwise, without vitiating the contract and grant such extension of time with the approval of the Bank for the completion



of the contract as he may think proper and sufficient in consequences of such delay, and the contractor, shall not make any claim for compensation or damage in relation thereto.

16. CERTIFICATE AND PAYMENTS

The contractor shall be paid by the Bank from time to time, by installments under interim Certificates to be issued by the Architect / Consultant to the contractor on account of the works executed by the contractor when in the opinion of the Architect, work to the approximate value, named in the Appendix as 'Value of work for interim Certificates' (or less at the reasonable discretion of the Employer / Consultant) has been executed in accordance with this contract, subject however, to a retention of the percentage of such value need in the Appendix hereto mentioned as 'retention percentage for interim Certificates' until the total amount retained shall reach the sum named in the appendix as Total Retention money after which time the installments shall be up to the full value of the work subsequently so executed in the interim Certificate, such amount as he may consider proper on account materials delivered upon the site by the Contractor for use in the work.

The Contractor shall be entitled to the payment of the final balance in accordance with the final Certificate to be issued in writing by the Engineer/ Consultant at the expiration of the period refer to as 'The Defect Liability Period' in the Appendix hereto, from the date of Virtual Completion or as soon as after the expiration of such period as the work shall have been finally completed and all defect made good according to the true intent and meaning hereof, whichever shall happen, provided always that the issue by the Consultant of any certificate during the progress of the works or after the completion shall not relieve the Contract from his liabilities in cases of fraud, dishonesty or fraudulent concealment relating to the works of materials or any matter dealt within the certificate, and in case of all defects and insufficiency in the works or materials which reasonable examination would have disclosed. No certificate of the Consultant shall of itself be conclusive evidence that any works and materials to which it relates are in accordance with the contract.

The Engineer / Bank shall have power to withhold any certificate if the works or any part thereof is not being carried out to his / employer satisfaction. The Architect / Bank may by any Certificate make any correction in any previous Certificate, which shall have been issued by him.

Payment upon the Consultant's Certificates shall be made within a period named in the Appendix as 'Period of honoring of Certificates' after such Certificates have been delivered to Employer.

17. DELAYED PAYMENTS

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

18. FORCE MAJEURE

Neither party shall be held responsible by the other for breach of any condition of this agreement attributable to any 'Act of God' Act of state, lockout of control or any other reason, beyond the control of the parties and any breach of clauses arising from much force majeure conditions as aforesaid shall not be regarded as a breach of the provision of this Agreement.

19. INCOME-TAX, SERVICE TAX AND WORKS CONTRACT TAX

Income Tax, Service Tax and Works Contract Tax shall be deducted at source by the client from the contractor' interim and final bill payments as per Statutory Regulations.

20. SITE MEETINGS

A senior representative of the contractor shall attend weekly meetings at works site and in addition meetings as and when arranged by Bank / Architect to discuss the progress of the work and sort out problems, if any and ensure that the work is completed in the stipulated time.

21. ACTION WHERE THERE IS NO SPECIFICATION

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

22. REPORTING OF ACCIDENT TO

The contractor shall be responsible for the safety of persons employed by him on the works and shall reports serious accidents to any of them whenever and wherever occurring on the works to employer who shall make every arrangement to render all possible assistance. This shall be without prejudice to the responsibility of the contractor under the Insurance Clause of the general conditions. Contractor shall take all precaution detailed in the safety code attached separately.

23. TYPOGRAPHICAL CLERICAL ERRORS

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

24. WORK PERFORMED AT CONTRACTOR'S RISK

The contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, goods, signs, temporary passages or other protection necessary for the purpose. All works shall be done by the contractor's risk and if any loss or damage shall result from fire or from others cause, the contractor shall promptly repair or replace such loss or damage free from all expenses to the employer.

The contractor shall be responsible for any loss or damage to materials, tools or other articles used held for use in connection with the work. The work shall be carried on to completion without interferences with the operations of existing machinery or equipment, if any.

25. WORK ENVISAGED

- a) The work shall involve Internal and External Structural Repair/ restoration/renovation work. Structural repairs include works in internal and external painting works, etc. including removal, re-fixing, repairs (if any while carrying out the civil work), necessary repairs to electrical installations, and any other damages/work resulting from the civil work, common spaces development. Apart from this, one meeting hall is to be constructed using steel structures and puff panel in the roof. Use of latest technology / methods for all repair, restoration and renovation work, drainage and sewage systems, etc.
- b) The Contractor shall submit a brief write up on the a) Technical Approach & Methodology, Explaining the understanding of the assignment and proposed methodology to carry out the assignment with emphasis on the expected problems and adoption of approach to solve them. b) A Work Plan containing details of main activities, duration of different activities and milestones to deliver the output consistent with the Technical Approach & Methodology. c) Organization & Staffing: Should contain the details of the technical & supervisory team to be deployed on the job including their qualifications and domain experience. Also, a list to be submitted detailing the documents, reports etc. proposed to be delivered considering feasibility of the final output.

26. WORK RESPONSIBILITY

- a) Assuming full responsibility for supervision including day-to-day supervision, compliance and observance of all labour and safety regulations, checking and inspection of samples that will be used in the repair /restoration/renovation work, monitoring and compliance, quality control, co-ordination with INDIAN BANK and the contractors and reporting daily progress by posting sufficient number of qualified technical staff (preferably graduate in Fire Engineering having minimum 02 years' experience in similar type of works) as necessary to ensure proper and timely execution of the said works as per drawings and specifications.



- b) Bio-data of technical staff shall be furnished to Indian Bank. Site Engineers shall be engaged full time during the progress of work on daily basis throughout the entire period of the Project for day-to-day supervision, ensuring smooth progress by prompt supply of drawings and giving proper directions and also co-ordination with all the agencies engaged in the design engineering and execution of various items of work as required. The technical staff will invariably report to the department every day and keep INDIAN BANK officers involved updated. The Architect shall have to coordinate his work with the works of all other trades.
- c) INDIAN BANK reserves the right to judge the capability of supervising staff and advise for change in case not found suitable or delay in assigned work.
- d) The measurements shall be generally recorded by the Site Engineer of the contractor and consultants in the presence of INDIAN BANK Official wherever necessary.
- e) The Site Engineer of the Contractor and the representative of Engineer / Consultant shall take joint measurements of the work as it progresses and record them directly in the Measurement sheet.
- f) The contractor shall quote the rate as per BOQ Specification.
- g) Extra/deviated items, as claimed by the contractor, shall not be recorded in Measurement Book until they are approved by the Competent Authority/ Consultants.
- h) In case some allegedly extra/deviated item is carried out by the Contractor while complying with approved drawings and specifications and the same is to be covered up, the Architect / Contractor shall check the item and its specification and record its measurements but simultaneously enter up the proviso that their admittance is subject to the approval by the Competent Authority i.e Bank. Both the measurements and the proviso shall be got signed by the contractor.
- i) The measurement book shall not be handed over to the contractor at any time. The contractor or his representative may be permitted by the Site Engineer or Project Management Consultant to see it in his presence and /or make a (concurrent) copy of his own. The contractor shall, however, be warned that his copy shall be regarded as an unofficial copy of the Indian Bank's Measurement Book. This is the only authorized document in the matter.
- j) The measurement shall be signed at the end of each session of measurement of the day's work, as the case may be, by both the parties (i.e. Measurer/Site Engineer of the PMC / Architect and the Contractor).

27. SPECIAL CONDITIONS OF CONTRACT

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

I/We hereby declare that I/We have read and understood the above instructions which have been issued as conditions of the contract.

(Signature of the Tenderer)



ARTICLES OF AGREEMENT

THIS AGREEMENT is made on this day ofmonth of between Indian Bank and having its FGM OFFICE at 1st floor, 17,Parliament Street ,Delhi-110001 (hereinafter referred to as the “Employer”) which expression shall include its successor, legal heirs and assignees of the one part.

AND M/s. having its office at (hereinafter referred to as the “Contractor”) which expression shall include its successor, legal heirs and assignees of the second part.

WHEREAS the Employer has caused drawings and bid documents for ‘Fire Fighting Systems- Installations and repair works at 17, Parliament Street Building, Indian Bank, Delhi-110001.

AND whereas the Employer has called for Tender vide ref. no. dated.....

AND whereas the contractor has submitted the Tender ref. no. dated to the Employer on

AND whereas the Employer has issued the work order ref dated..... to the contractor to do the work.

AND whereas the Contractor has agreed to execute the work as per drawings, specifications, conditions of contract and Work Order.

AND whereas the Employer has accepted the Contractor’s bid as aforesaid and whereas the bid submitted by the contractor has been accepted for such sum as may be ascertained to be payable in terms of the Bill of Quantities and which sum is estimated to be Rs. (Rupees) hereinafter referred to as the said “Contract Agreement”.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS: -

- 1) In consideration of the said Contract Sum to be paid at the times and in the manner set forth in the said Conditions the Contractor shall carry out and complete the Works in terms and conditions herein contained and according to the general conditions of the contract, notice inviting tender, special conditions of contract, general scope of work, technical specifications, schedule of rates and instructions to be given by and the supervision of and to the entire satisfaction of the Employer.
- 2) **Contract Price, Taxes and Payment Terms:**
Total contract price is Rs. + GST which is inclusive of cost of materials, equipment, installation charges and tools and tackles required for execution of the job. Above price is inclusive of all taxes & duties except GST in respect of this contract. No claim in this respect will be entertained. Income tax on payments will be deducted and deposited by Employer in accordance with the sales tax law of the state and the provisions of tax deductions at source under income tax act 1961.
- 3) **Completion Period:**
Time is the essence of the Contract. The work is to be completed in all respects within **45 days** reckoned from 7th day from the date of issue of the Work Order or handing over of site whichever is later. If the Contractor fails to complete the job within the agreed time period, the Contractor will have to bear liquidated damages as per the relevant clause mentioned in the Tender Documents.
- 4) **Earnest Money:**

The Contractor has deposited an amount of **Rs.92, 000/- (Rupees Ninety Two Thousand only)** as earnest money.
- 5) **Inspection of Site:**

The Contractor has inspected the site before submitting his bid and has satisfied himself as to the nature of the work to be executed on the site. Any difficulties which the Contractor may come across in the course of the work shall in no way relieve the contractor to claim or receive extra payment



unless the Employer is of the opinion that such difficulties could not have been foreseen and the Employer consents in writing.

6) **Supply of Material and Labour:**

The Contractor shall arrange all labour, materials, equipments, tools, tackles and everything necessary for the completion of the work. The Contractor will assume all responsibility for the safety, protection and accounting of all material and equipment and the work during construction. All materials used by the Contractor shall be of the best quality conforming to the required specification mentioned in the bid document and will be subject to the approval of the Employer. All such materials not approved by the Employer shall be removed at once by the Contractor at his own expense. The Contractor shall also at his own expense arrange for carrying out any test of materials which the Employer may from time to time require or if so desired by the employer.

7) **Defective Work / Materials:**

If any part of the work done by the Contractor is found defective in workmanship or if bad or inferior materials have been used the Contractor shall at his own risk and cost demolish all such defective work and rebuild the same and / or replace the bad or inferior materials used within a time frame mentioned to the satisfaction of the Employer. The decision of the Employer in this regard shall be final and binding on the Contractor. In case of default of the contractor to remove the defective work and rebuild the same or replace bad or inferior materials as directed by the Employer, the Employer shall be entitled to employ anyone else to carry out the same at risk and cost of the Contractor and recover all expenses incurred in this regard from the contractor.

8) **Inspection of Work:**

During progress of the work the Employer shall be entitled at all times to have access to and inspect the work.

9) **Supervision:**

The Contractor shall provide one or more competent and technical qualified engineers duly and fully authorized to act on his behalf in all matters relating to the works to be carried out under or any other matter concerning this agreement and who shall at all times be present at the works while any work is in progress as per directions, explanations & instructions of Employer.

10) **Compliance with Statutory Regulations & Work Rules:**

The Contractor shall be responsible for complying with the applicable laws / bye laws / Regulations in force from time to time and shall have to bear all statutory liabilities to the workers / personnel engaged for the job. Nothing will be paid extra in this regard. If any amount is paid by the Employer with this regard the same amount shall be deducted from the Contractor's dues. The Contractor shall have to arrange insurance cover for the workers / personnel engaged by him for the job.

11) **Determination of Contract:**

In the event of Contractor failing to keep / adhere to agreed schedule of work, or in the event of the Contractor failing to comply with the provisions of this contract by default and / or negligence and / or suspension of work or in the event of Contractor failing to complete the work within the stipulated period, the Employer may terminate this Agreement forthwith and employ, at the Contractor's risk and cost, another contractor or sufficient number of workmen to complete the work.



12) **Force Majeure:**

This clause will be operative only if the work is delayed by

- a. Acts of God
- b. Earthquake or floods or similar natural calamities.
- c. Serious loss or damage by fire or lightning.

In case any Force Majeure condition herein mentioned occurs and continues for a period exceeding 15 days the parties hereto undertake to sit together and devise ways for expeditious and proper performance of the obligations of the parties under this order.

13) **Arbitration:**

“ In the event of any dispute or difference relating to interpretation and application of provisions of the contract and all disputes/ claims whatsoever which shall either during the continuance of the contract or afterwards either between the parties to the contract or the respective representatives touching the construction/ application of any provision/ clause mentioned in the contract or any account or liability between the parties to the contract or as to any act or deed or omission of any party to the contract, in any way relating to these presents, shall be first at the discretion of the Bank attempted to be resolved in good faith by mutual discussion within 30 days of the dispute or question being raised failing which the same shall be settled by arbitration in accordance with provisions of Indian arbitration and Conciliation act 1996.

The Parties concerned shall designate an arbitrator on mutual consent/ consensus. The venue of the arbitration shall be exclusively at New Delhi and any award passed by arbitrator shall be final, conclusive and binding upon the parties and shall be deemed to have been made between parties themselves. The parties to the dispute shall share equally the cost of arbitration as intimated by the arbitrator”.

IN WITNESS whereof the said contracting parties have set their hands and seals on the day and year first hereinabove witness.

Witness Address

Employer

Witness Address

Contractor

SPECIAL INSTRUCTIONS TO THE TENDERER

1. This specification shall be read in conjunction with General conditions of contract as applicable for this project.
2. The tenderer shall design the equipment considering the above and the site conditions. After award of contract no claim for extra payment will be entertained.
3. Within two weeks of placement of order, the Contractor shall furnish the load data; insert details and other such details/ information.
4. The supplier shall submit any certificate required by the Bank. Fire NOC (License) from fire department should be availed by contractor and to be submitted to bank. No extra payment for the same shall be provided. An amount of 10% will be withheld until the clearance / NOC certificate is submitted to bank by concerned government bodies and local authorities for the work done.
5. The supplier shall submit relevant material test certificates. The work to be executed as per NBC 2016 Fire Safety Part IV.
6. List of preferred makes of components as per list furnished in this specification shall be adhered to for bought out items.
7. A write-up on testing facilities available in the works of the Tenderer shall be furnished.
8. The contractor shall ensure that minimum amount of assembly is necessary at site. Site assembly shall be avoided as far as possible.
9. The quoted price shall include charges on account of, packing, forwarding, transport, insurance etc. The quoted price shall remain firm and binding and shall not be subjected to any escalation whatsoever on any account during entire period of supply, installation, testing & commissioning.
10. The work shall be guaranteed for a minimum period of one year of trouble free operation after commencement of regular operation and shall include free servicing, repair and replacement of parts by the Contractor.
11. **Workmanship and performance warranty:**
 - i. The materials used shall be new and best of its kind available and shall conform to standards as mentioned in the technical specification.
 - ii. The supplier shall guarantee satisfactory performance of equipment/ system as per relevant guidelines.
 - iii. The guarantee shall also cover faulty design/ materials/ workmanship. All rectification or replacement under guarantee shall be done by the supplier free of cost.
 - iv. The conditions regarding guarantee of equipment shall also be governed by the relevant clauses of general commercial conditions.
12. Permanent, non-rusting metal tag shall be affixed to the equipment with tag number.
13. The tenderer shall furnish the questionnaire as asked for in of this document, along with the tender.
14. The tenderer shall fill up the price data sheet and submit in a separate cover along with the tender.
15. The tenderer shall furnish a Time Bar Chart showing breakup of time required for various activities viz., submission and approval of drawings, raw material procurement, engineering, various shop activities, order placement for bought out items and their delivery to shop, assembly, testing, inspection, dispatch, erection and commissioning.
16. The tenderer shall furnish the procedure proposed for conducting performance guarantee test; for review by purchaser.
17. The tenderer shall ensure installation of all electrical equipment by approved licensed electrical Contractors and subsequent approval by electrical & fire inspector and other competent authority, if necessary.

GENERAL

1.1 MECHANICAL

- a) The systems shall be of latest design having directional collective control with or without attendant. Digital indicators and illuminated buttons shall be provided as per technical specification. Work to be done as per dimensions recommended by relevant standards and enclosed drawing.
- b) Safe access for maintenance and removal of all mechanical and electrical parts shall be ensured.
- c) All parts requiring replacement or inspection or lubrication shall be easily accessible without the need for Dismantling of other parts/ equipment. All electrical cables shall be laid such that they are not liable to damage and can be easily inspected and maintained.
- d) All machinery or equipment included under this specification shall be equipped with safety devices and clearance to comply with recognized standards and purchaser's requirement.
- e) Welding shall be carried out as per relevant IS standards.
- f) Final testing and demonstration of the work to be presented to the bank officials.

1.2 ELECTRICAL:

The scope of supply shall include all the electrical equipment/ items required for smooth and efficient operation of fire fighting systems and fire alarm systems. The scope includes the following:

- a) The wiring work to be properly ducted and neatly done.
- b) Complete fire panel work to be done as per instruction of Bank's fire Officer.
- c) Earthing point to be provided wherever necessary.
- d) All sundry erection materials required for installation and wiring of electrical equipment and for cable laying to be done by contractor.
- e) Statutory clearances, approvals from Local Fire Inspectorate / statutory authorities etc. to be obtained by tenderer.
- f) The equipment offered shall be suitable for trouble free and efficient service.
- g) The electrical equipment shall comply with the latest revision of relevant standards and wherever such Indian Standard is not available, International codes and practices shall be followed. The equipment shall be dust and water proof.
- h) Electrical equipment shall conform to latest Indian electricity rules and regulations and the statutory requirement of Government of India and the Government of State as regards to the safety requirement, earthing and other essential provisions specified therein.
- i) The materials used and the equipment supplied shall be new, reliable and of the class most suitable for the purpose for which they are intended. The equipment designed and the installation shall allow easy access to facilitate inspection, maintenance and repairs.
- j) Test and warranty Certificates of the equipment shall be submitted before installation of each equipment.
- k) The operating voltage for control supply shall be indicated by the tenderer.
- l) The control panels to be provided shall be suitable for floor/ wall mounting. This shall be fabricated from steel sheet of 2mm thickness. The bottom most equipment shall be mounted at least 380 mm above the floor level of the panel. (Any alteration in the level of pit will be carried out by the purchaser). The layout of components in control panel shall be so as to provide adequate safety clearances and ease of operation and maintenance.
- m) The minimum rating of the isolating switch and contactor shall be 63A and 32 A or 125% the full load current of the drive, whichever is higher. Earthing of all electric equipment shall be done as per relevant BIS, latest IE rules and statutory regulation of the Government of Tamilnadu.

1.3 PAINTING

- a) General service painting – This includes structures, plate works, piping, ducting and machinery of mechanical nature (except motors, resistors, panels, switch gears etc.).
- b) All parts of the elevator shall be thoroughly cleaned of all mild scale, rust and foreign materials by appropriate method of cleaning such as solvent cleaning, hand tool and power tool cleaning, flame cleaning, blast cleaning etc. After that, all parts including frames, gear boxes etc., shall be sand blasted as per STANDARDS.

- c) All parts inaccessible after assembly shall be painted before the assembled while paint is still wet. After installation at site, damaged areas shall be touched with primer and paint of approved colour shall be applied.
- d) All machine pads bearing surfaces on structure or housing shall be painted with white lead.
- e) Switch Board/ Control panel painting- This includes fabricated sheet metal items namely electrical control panels, switch boards, control disk, cabinets etc.
- f) Mild scale, rust etc., shall be removed by pickling in a bath of dilute Sulphuric, Hydrochloric or Phosphoric acid, with or without heating, followed by thorough rinsing by fresh water to remove acid traces. Pickling in Sulphuric acid may be followed by dipping in dilute Phosphoric acid containing iron phosphate. Prior to pickling heavy deposits of oil, grease, soil and other foreign matters shall be removed by solvent cleaning.
- g) The quality of paint and colour scheme of finish coats shall be as approved by the owner.

1.4 INSPECTION & TESTING:

- a) GENERAL: The bidder based on the broad outline inspection procedure indicated in this Section shall finalize with Bank prior to the award of contract, the detailed procedure for inspection, testing (at factory/ site) alongwith the schedule of time and period of individual activities.
- b) The Contractor shall submit relevant test Certificates for all electrical equipment, cables. Following are the guidelines for shop testing. All motors to be routine tested as per latest IS codes. All control panels/ MCCS shall be routine tested as per latest IS codes. Thyristor/ Rectifier panels as per latest IEC. Dry type power transformer as per latest IS codes.
- c) Similar test Certificates shall be submitted in respect of items like wire ropes, chains, couplings, gears, gear boxes, rope drums, pulleys, shafts etc.
- d) Contractor shall give adequate notice to the owner in regard to shop testing of major items like motors, etc. in order to enable the purchaser to witness the tests if required by the purchaser.,

1.5 INSPECTION AT SITE:

All tests shall be carried out in the presence of the owner/ Inspector and any corrections found necessary shall be approved by the owner/ inspector and shall be carried out with minimum of delay. The supplier shall be responsible for producing all necessary working sketches and drawings to the approval of the owner/ inspector.

In case of unit capacities and design parameters guaranteed by the Contractor are not established during the performance guarantee testing, the Bank at its discretion may reject or accept the elevator after assessing its technical suitability. The Contractor shall be given 2 months' time after commissioning for rectification to achieve the necessary design parameters, beyond which the Bank may reject.

1.6 ELECTRICAL TESTS:

- a) Visual check for adequacy & completeness of scope of supply.
- b) Insulation test on electrical equipment wiring.
- c) Satisfactory operation of panel, safety devices etc.
- d) Correctness of all circuits and interlocks.
- e) Satisfactory operation of electric motors.

It is the responsibility of the tenderer to arrange inspection by the statutory authorities'/city corporation and to obtain commissioning approvals, certificates etc before putting systems in to service. Time of completion may be treated completely only after obtaining approval and certificates from the appropriate statutory authorities.

The work shall be under warranty of minimum of 12 months from the date of handing over during which all regular servicing are to be done with free of cost. Bank will not make any extra payment.

SIGNATURE OF THE TENDERER WITH SEAL

TECHNICAL SPECIFICATIONS

1. Scope

These specifications are intended to cover the entire supply, installation, testing and commissioning of Fire Hydrant (wet riser system), Fire Pump and Sprinkler System, in the first class workmanship like manner and include all the works and materials as per particular specifications. This work shall be carried out in accordance with the regulations of local codes, if any, and the following specifications and codes which may govern the requirements of materials and equipment supplied and Fire protection manual and rules for system installations of Tariff Advisory Committee of Fire Insurance Associations of India.

2. a) Drawing /Specifications

The drawings/ specifications and bill of quantities shall be considered as a part of this contract. However, any minor change, if found, essential to co-ordinate the installation of this work with other traders shall be made without any additional cost to the owners. The exact location, distance and levels, etc. will be governed by the space conditions. Generally, works to be carried out as per BIS standard and applicable IS codes are listed below: -

IS: 884-1995: Specification for first Aid Hose Reel for Fire Fighting.

IS:901-1988: Specification for couplings, double male and double female, instantaneous pattern, for firefighting purposes (revised).

IS:902-1992: Specification for suction hose couplings for firefighting purposes (revised).

IS:903-1993: Specification for fire hose delivery couplings, branch. Pipe, nozzle and nozzle spanner (revised).

IS:904-1983: Specification. for two-way and three-way suction collecting heads for firefighting purposes (revised).

IS: 905-1980: Specification for delivery breaching, dividing and collecting, instantaneous pattern, for firefighting purposes (revised).

IS: 906-1992: Specification for branch with revolving head for fire fighting Purposes (revised).

IS: 907-1984: Specification for suction strainers, cylindrical and hose types for Fire fighting purposes (revised).

IS: 908-1975: Specification for fire hydrant, stand post type (revised). '

IS: 909-1992: Specification for underground fire hydrant, sluice valve type (revised).

IS: 910-1980: Specification for combined key for hydrant, hydrant cover and valve.

IS: 936-1966: Specification for underground fire hydrant, double-valve type (revised).

IS: 937 -1981: Specification for washers for water fittings for firefighting purposes (revised).

IS: 1641-1988: Code of practice for fire safety of buildings (general): General principles and fire grading.

IS: 1642-1989: Code of practice for fire safety of buildings (general): Materials and details of construction.

IS: 1646-1982: Code of practice for fire safety of buildings (general): Electrical installation.

IS: 2871-1983: Specification for branch pipe, universal, for firefighting purposes.

IS: 3582-1991: Specification for basket strainers for firefighting purposes (cylindrical type).

IS: 3844-1989: Code of practice for installation of internal fire hydrants in multi-storey buildings.

IS: 5290-1993: Specification for landing valves.

IS: 15105-2002: Design and Installation of Fixed Sprinkler system.

IS: 16088-2012: Chlorinated Polyvinyl Chloride (CPVC) Pipes for automatic sprinkler Fire Extinguishing systems.

b) **Completion Drawings**

At the completion of the work and before issuing of certificate of 'Virtual Completion, the contractor shall submit to the Owner, layout drawings drawn at approved scale indicating the complete details as installed, in 6 sets of Blue Prints as well as the originals.

3. **Foreman/supervisor**

The contractor shall employ a competent, licensed, qualified, full time electrical foreman/supervisor for the work of fire protection work installations in accordance with the drawings / specifications. The foreman/supervisor shall be available at all times on the site to receive instructions from the Engineer in the day to day activities throughout the duration of the contract. The foreman/supervisor shall correlate the progress of the work in conjunction with all the relevant requirement of the local authorities. The skilled workers employed for the work should have requisite qualifications and should possess competency certificate.

4. **Inspection and Testing**

Contractor shall employ a full time qualified Engineer who shall be available at all working hours at site for taking instruction and to look after the quality of the work.

Contractor shall maintain at site the following tools and instruments, but not limited to the list below, in working condition.

- a) Vernier caliper, Micrometer
- b) Steel tapes of various lengths
- c) Hydraulic test machine, hand pump, pressure gauges etc.
- d) Hydraulic crimping tool
- e) Earth testing megger
- f) Pipe bending tool, thread cutting die, bench vice etc.
- g) Cable jointing kit
- h) 1000 V Insulation tester

5. Clearance from local Authorities after completing the proposed works in this tender, it would be the whole responsibility of the contractor to get the entire system should be approved by Local Authorities.

6. **Painting**

All piping, equipment, cabinets furnished under the specification shall be properly painted with one coat of anti-corrosive primer and two coats of 'FIRE RED' (SHADE NO. 536 of IS 5- 1961) Synthetic enamel paint after installation.

7. **Guarantee**

The contractor shall guarantee that all the materials and workmanship of the entire system are of the first class quality. All the equipment apparatus shall be guaranteed. Defective equipment /material /workmanship found short of the specified quality shall be rejected.

8. **Defects and liability**

All the equipment/material and the system shall be guaranteed against defective material and workmanship for a period of 12 months from the date of commissioning and handing over to the Bank along with all relevant documentation i.e Virtual completion of the work. The contractor shall repair/rectify or replace all the defective materials, components free of cost during the guarantee period. In addition, normal maintenance shall be carried out periodically during the defects liability period including replacement of spares, as required.

9. **Instructions Manual/ Completion Drawing/Training**

Contractor shall furnish detailed instructions and operation manual in duplicate. The contractor shall also furnish detailed completion drawings to an approved scale. The drawings shall be inclusive of control schematics, if any. The contractor shall train the owner's personnel in the operation of maintenance of the system.

10. **Testing**

The contractor shall arrange to test the entire system as per the procedures enumerated under particular specifications, after the erection is completed. If the results of the test are not found to be satisfactory by the Engineer-in charge, necessary rectification shall be done until the test results are found to be satisfactory. The installation shall be deemed to be completed only after the successful completion of the tests.

HYDRANT SYSTEM

1. Data

Type: Internal Hydrant System

No of Hydrants: 5

No of Fire Hydrant Pumps: 3 (1 Electrical + 1 Diesel+ 1 Jockey pump). Electric Pump and Disesel pump of capacity 2280 LPM@88 mtr head and Jockey Pump of Capacity 180 LPM@88 mtr head.

2. Scope of Work

Work under this section shall consist of furnishing all labour, materials, equipments and appliances necessary and required for complete installation of Fire Hydrant System as specified in the schedule of quantities.

3. General Requirements

- a) All materials shall be of the best quality conforming to specifications and subject to the approval of the Engineer/ Consultant.
- b) Pipe and Fittings shall be fixed truly vertical, horizontal or in slopes as required in a neat workman like manner.
- c) Pipes shall be fixed in a manner as to provide easy accessibility for repair and maintenance and shall not cause obstruction in shafts, passages etc.
- d) Pipes shall be securely fixed to Brick/RCC walls and ceilings by suitable clamps at intervals specified. Only approved type of anchor fasteners shall be used.
- e) Valves and other appurtenances shall be so located that they are easily accessible for operations, repairs and maintenance.

4. Pipes & Fittings

- a) Pipes for underground header shall be M.S black conforming to IS (Heavy class) duly wrapped and coated as per IS: 10221 with flanged/welded joints. Flanges shall be provided at regular intervals not exceeding 12M.
- b) Pipes for Risers and header running inside the building shall be M.S black conforming to IS (Heavy class) with screwed/ welded joints having flanges at regular intervals not exceeding 12M.

5. Jointing

Joints with M.S/G. I pipe of size 50mm and above shall be either screwed or butt welded with flanges at regular intervals as stated under clause 3. The hoisting with M.S/G. I pipe of less than 50mm dia. shall be with conventional heavy class screwed fitting like Tee, Socket, Elbow, reducers etc. All flanges shall confirm to IS: 6392-1971.

6. Excavation

- a) Excavation for underground pipe lines shall be in open trenches to levels and grades shown on the drawings or as required at site. Pipe lines shall be buried to a minimum depth of 1,00m.
- b) Wherever required, Contractor shall support all trenches of adjoining structures with adequate timber supports.
- c) On completion of testing, coating and wrapping, trenches shall be refilled with excavated earth in 15 cms layers and consolidated to re-store ground condition to original status. Prior to excavation, contractor to ensure that no adjoining structure or pipe line is affected / damaged.
- d) Contractor shall dispose off all surplus earth out of the Bank's premises or as directed by Engineer.

7. Hydrant Valves (Landing Valves)

- a) Landing valves shall be 63 mm dia. oblique female instantaneous pattern with caps and chains. Landing valves shall conform to IS: 5290 in all respects.
- b) Landing valves shall be of gun metal and fitted with instantaneous coupling conforming to IS - 901. The coupling shall be fitted with an internal plug secured by a chain. Landing valves shall be installed on hydrant level. The landing valves shall be connected to the wet riser stand pipes by means of a suitable tee, the cost of which is deemed to be included in the unit rate for piping.

8. Hose Pipes

All hose pipe shall be of 63mm diameter made of controlled percolated hose conforming to IS-8423. The hose shall be capable of withstanding a water pressure of 8.5 Kg/cm without undue leakage or sweating. Hose shall be provided with instantaneous spring lock, type couplings. Rubber lined hose shall be supplied if specifically called for in the Bill of Quantities.

9. Branch Pipe & Nozzle

Branch pipes shall be of copper/aluminum with leaded tin bronze ring at the discharge end to receive the nozzle and provided at the other end with leaded tin bronze ring to fit in to the instantaneous coupling. Nozzle shall be spray of Fog type of diameter of not less than 16 mm and not more than 25 mm. Nozzle shall be of leaded tin bronze or aluminum. Branch pipe and nozzle shall be of instantaneous pattern.

10. Hose Reel

Hose reel shall conform to IS:884 in all respects. Hose reel shall be of 20 mm dia. bore reinforced rubber of length 36.0 Mtr. and fitted with 6.35 mm dia. nozzle. The hose reel shall be recessed swinging type with reel drum. The hose shall be provided with coupling and permanently connected to the landing valve.

11. Hose Cabinet (External)

The cabinet will have watertight doors, sloping canopy on top, holdfasts at the bottom etc. for installing over brick pedestal angle iron frame in outdoor areas. Hose cabinet shall be glass fronted with single hinges door and lock. The cabinet shall be made of 16G M.S. sheet and painting with two coats of scarlet red enamel paint over a coat of metal primer etc. The hose cabinet shall be of suitable size to accommodate the following:

2 Nos 15 MTR 63mm,
Hose Pipe 1 No. 16mm, Branch Pipe & Nozzles.

12. Hose Cabinet (Internal)

Hose cabinet shall be glass fronted with single hinges door and lock. The cabinet shall be made of 16 G. M.S. sheet and painting with two coats of scarlet red enamel paint over a coat of metal primer etc. The hose cabinet shall be of suitable size to accommodate the following:

- a. Hose pipe: 2 lengths of 15 Mtr 63mm dia.
- b. Branch pipe & nozzles: One set.

13. Fire Brigade Inlet Connection

Fire brigade inlet connections to the system shall comprise of 4 instantaneous pattern 63 mm dia. male inlet shall be with cap and chains complete with a 6"/4" dia. sluice valve, non return valve, housed in a M.S. cabinet with glass fronted door. The cabinet shall be suitable for outdoor mounting.

14. Testing

After laying and jointing, the piping shall be pressure tested by hydrostatic method (using hand or hydraulic test pump with pressure gauge etc). The piping shall be slowly filled with water in order to expel all the air. The piping shall then be allowed to stand full of water for 24 hours. Any leakage at flanges or elsewhere shall be rectified. The pressure shall be then applied by means of a test pump (either hand operated or power operated). The test pressure shall not be less than 1.5 times the working pressure of the system. However, the test pressure shall not exceed 12.5 Kg/cm² in any case. Pressure gauges used for the test shall be accurate and shall preferably have been re-calibrated before the test. The open ends of the piping shall be plugged during the test. Capacity of pumps shall be checked with respect to the contractor's piping and equipment layout. Tests shall be conducted to determine the delivery head, flow and BHP of pumps after installation. The test results shall correspond to the performance curves. All the leaks and defects in joints revealed during the test shall be rectified to the satisfaction of the Engineer-in-Charge. The system shall also be tested for its desired performance and function by opening hydrant valves on each floor separately and four landing valves simultaneously. The flow of water at the top most hydrants shall be checked when three landing valves below are open. The cutting in and cutting out pressure setting of starting device shall also be checked for its correct operation. The test results shall be recorded and counter-signed by Engineer-in-Charge and submitted in triplicate for approval to the Employer.

15. Air Vessel/Air Cushion Tanks

- a) An Air Vessel of suitable size and capacity indicated in schedule of quantities shall be provided. The tank shall be complete with 20mm dia. Cast Iron Air Valve, Stop Valve (20mm dia.), Drain valve (20mm dia.) pressure gauge and including all connecting 20mm dia. M.S Galvanized piping, fittings and fixing brackets as required to complete the work as per Site conditions.
- b) Air Cushion tank shall be provided as per schedule of quantity and measured by numbers and shall include Air Valve, Pressure Gauge, globe valves of suitable size for testing and draining, M. S. Clamps, Pipes, Fittings, Tees, Elbows, Union and all other items required to complete the work.

16. Drain Valves

The Contractor shall provide 50mm dia, G.I. pipe as per IS:1239 medium class with 50mm gun metal full way valve for draining any water in the system in low pockets wherever required. Pipe up to a length of 5M should be included in this item.

17. Valve Chamber

Contractor shall provide brick masonry chamber of suitable size as indicated in schedule of quantities in cement mortar 1:6 (1 cement: 6 coarse sand) on cement concrete foundations (150mm thick 1:5:10 mix (1 cement: 5 fine sand: 10 graded stone aggregate 40mm nominal size), 15mm thick cement plaster in cement mortar 1:4 (1 cement: 4 coarse sand) inside and outside finished with a floating coat of neat cement inside with Cast Iron surface box approved by Fire Brigade, including excavation, back filling complete.

18. Pipe Protection

All pipes above ground and in exposed locations shall be painted with one coat of red oxide primer and two or more coats of synthetic enamel paint of approved shade and make. All underground M. S. Pipes must be protected with anti-corrosive treatment as per IS:10221 to the satisfaction of Engineer-in-charge and wrapping of pre-laminated self adhesive composite sheets of polyethylene and bitumen similar to PYPKOTE shall be acceptable as corrosive treatment for underground piping.

19. Pipe Supports

All pipes shall be adequately supported at a maximum interval of 3 M from ceiling/walls from existing inserts, if available, by structural clamps fabricated from M.S.Structural e.g. Rods, Channels, Angles and Flats. All clamps shall be painted with one coat of red lead and two coats of black enamel paint. Where inserts are not provided, the contractor shall provide anchor fasteners. The design of all supports/clamps must be got approved from the Engineer-in-charge before execution.

20. Testing

- a) All piping in the system shall be tested to a Hydrostatic Pressure of 14 Kg. /sq.cm or twice the design pressure (whichever is higher) without drop in pressure for at least 2 Hours and there after the whole system shall be hydraulically tested at 3.5 Kg. /sq.cm above the pump shutoff pressure or 12 Kg. /sq.cm whichever is higher for 24 hours without any drop in pressure.
- b) The Contractor shall rectify leakages, if any, and replace all defective components and retest the system as per above requirements to the satisfaction of Engineer-in-charge.

21. Measurements

- a) Pipes shall be measured by linear metre and shall include all fittings, flanges, jointing, clamps, hangers and all other material necessary and required (whether specified or not) to complete the system including painting, testing and commissioning.
- b) Valves shall be measured by numbers and shall include matching flanges, rubber gaskets, bolts, nuts, washers and all items necessary and required and as given in the specifications to complete the work to the satisfaction of Engineer-in-charge.
- c) No additional payment shall be admissible for cutting holes or chases in walls or floors or columns/ underground /overhead tanks etc. and making good the same to the satisfaction of Engineer-in-charge and making connections to pumps, various equipments and appliances or for making channels/trenches to complete the work. Similarly, excavation and backfilling to original status for laying underground pipes shall not be paid for separately but included in pipe-laying item.

PUMPS. MOTORS. CONTROLS AND ALLIED ELECTRICAL WORKS

1.1 PUMPS

GENERAL: - Pumps required for water circulation shall be of capacities indicated in the schedule of equipment. Pumps shall be of horizontal, enclosed impeller, centrifugal type, Negative Suction. The construction of the pumps shall be as follows;

| No. | Description | Material / Type of Construction |
|-----|----------------|---|
| 1 | Pump | Horizontal Centrifugal |
| 2 | Casing | Cast Iron/Cast Steel |
| 3 | Impeller | Bronze/Gun metal |
| 4 | Shaft | Steel/Stainless steel |
| 5 | Bearings | Heavy duty ball/ Roller bearing |
| 6 | Base Plate | Cast iron/Fabricated MS |
| 7 | Flanges | As per ASA Specifications of IS specifications. |
| 8 | Packing | Shaft Seals |
| 9 | Maximum speed. | 2900 RPM |

The drive motor shall be provided with starter confirming to IS:1822. The starters shall be of totally enclosed metal clad and dust proof construction. The motors of 7.5 HP and below shall be provided with DOL starters while those above 7.5 HP shall be provided with automatic star delta starters. The starter shall have thermal overloads on all the phases, under voltage and single phasing protection. Suitable number of extra contacts shall be provided for interlocking and indicating lamps. Suitable ammeter with CTS shall be provided with for starter for motors above 7.5 HP.

- a) Pumps shall be installed as per the manufacturer's instructions. Pump sets shall be installed on concrete block which in turn is mounted on 75 mm thick isolation cork or any other vibration isolation, the static deflection in the spring shall not be less than 25mm with additional travel to solid of not less than 15mm.
- b) The contractor shall submit performance curves for pumps supplied by him. The capacity of each pump shall be checked with respect to the contractor's piping equipment layout. Tests shall be conducted on each pump set, after completion of the installation w.r.t. to delivery head, flow and BHO. The tests results shall correspond to the performance curves. The equipment, instruments and labour required for testing shall be furnished by the contractor.

1.2 Motors

- a) Rating
The ratings of the motors shall be as indicated in schedule of equipment and schedule of quantities. The rating shall be on the basis of ambient temperature and allowable maximum temperature rise as specified.
- b) Standards
All motors shall comply with IS:325, IEC 34, IEC 34-1 or BS:2313 in respect of general requirements and performance. Motors shall also conform to IS: 1231, IEC 72.1 for 72.1 for foot mounted motors and IS:2223 and IEC 72.2 flange-mounted motors.
- c) In general, all the motors above 1 HP shall be 3 phase unless otherwise specified, motors of 1 HP or below shall be either 3 phase or single phase as required.
- d) Motors shall run at all loads without appreciable noise or hum. motors shall be of the following design as specified.
 - i. Drip proof squirrel cage induction motor pumps.
 - ii. Windings of motors, shall be class B insulated and fully tropicalised.
 - iii. The insulating materials used shall not be liable for action of fungi or microbes. The insulation shall afford adequate protection against chemically aggressive gases and vapor as well as against conductive dust.

- e) Motors shall be rated for continuous duty as defined in IS:325. All motors shall have suitable torque characteristics as required by the duty of driven equipment. Motors shall be suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply.
- f) Motors shall be provided with a combination of ball and roller bearings. The roller bearing shall be fitted at the driving end and ball bearings shall be of standard cartridge type which effectively seals off dust and moisture. Suitable grease nipple shall be provided for regreasing the bearing.
- g) Motors shall be provided with a cable box to suit aluminum conductor, PVC insulated, PVC sheathed and steel armoured cable.
- h) Motors shall be so designed to operate successfully under the following conditions of voltage and frequency variation.
 - i. Where the voltage variation does not exceed 10% above or below normal.
 - ii. Where the frequency variation does not exceed 5% above or below normal.
 - iii. Where the sum of the voltage and frequency variation does not exceed 10% (Provided the frequency variation does not exceed 5%) above or below normal.
- i) Motors starting current shall not exceed the following values.
Squirrel cage motors: 600% of full load current. The starting current of the motors shall be limited by using the following starters, as required.
- j) **Type of motor Starting method**
 - i. Squirrel cage motors Direct-on-line starter. upto 7.5 HP.
 - ii. Squirrel cage motors Star / Delta Starters/ of 10 HP and above.

1.3 .Motor Starters

- a) Motor starters shall be manufactured in accordance with IS: 1882 or BS:587. The starters shall be totally enclosed, metal clad, dust and vermin proof construction. All starters shall be direct-on-line/Automatic Star/Delta/Auto-transformer etc. as required.
All starters shall be continuously rated and shall be of automatic contactor type. All starters shall be suitable for 415 volts, 3 phase, 50 Hz. AC supply.
- b) The making and breaking capacity of the contractor shall be as per category A-4 conforming to BS: 775. All the contacts shall be solid silver or silver faced and all the contractors and starter equipment shall be designed for not less than 40 operations per hour.
- c) Unless otherwise specified, all starters shall have integral 'Start/Stop' push buttons. Start push buttons shall be coloured green and shall be shrouded to prevent inadvertent operation. Stop push buttons shall have mushroom heads and coloured red. All push button operated contractors shall be provided with a maintaining/running contact.
- d) All remote control circuit taken from the starter shall operate at 230 Volts or lower voltage.
- e) Motor starters shall be provided with thermal overload relay with adjustable settings, on each phase for three phase motor. The motors of 10 HP. and above shall be provided with current transformer operated thermal overload relays. The thermal overload relays shall have thermal characteristics suitable for the associated motor its starting characteristics and suitably compensated for ambient air temperature variation. Single phase preventer shall be provided for all the three phase motors.
- f) Green, Red, Amber indicating lamps shall be installed on each starter to indicate open and close conditions of the contractors and fault conditions of motors as directed by the thermal overload relay.

1.4 Motor control centre and allied electrical works

- a) Motor control centre shall be of cubicle pattern made out of 16 SWG MS sheet duly painted with anti-corrosive paint and synthetic enamel paint.
- b) All switch fuse units shall be of double make and break type and shall be fitted with HRC fuses of 35 MV A rupturing capacity.
- c) 100 mm square flush type ammeter of suitable range as mentioned in Bill of Quantities and 0-500 volts voltmeter with CTS and selector switches shall be provided.
- d) Three coloured phase indication lamps with toggle switch to be provided in incoming line.
- e) The bus bars shall be of aluminium flat with colour coded PVC tapes.

- f) Automatic star-delta or DOL motor starter with no. v.o.l.t relay bimetallic thermal overload relays, ON/OFF indication lamps to be provided for each motor.
- g) Cables of approved make shall be laid either in built-in trenches or on walls with MS clamps, saddles fixed at one meter interval. Wherever required the cable shall be laid in outdoor trenches including excavation of earth, providing sand cushioning, brick protection, back- filling, dressing of earth etc.
- h) Cables will be terminated in Motor terminal block/in switch fuse units/starter with brass gland and crimped copper lugs.
- i) The control panel shall provided with at least two earth terminal (of brass nut and bolts) for connecting them with main system earth.

1.5 AUTOMATIC DIESEL ENGINE DRIVEN PUMPING SET

The pumping set shall be centrifugal end suction type fire pump designed to discharge required quantity of water as per the requirements of T AC and driven by a diesel engine of following specifications.

Diesel Engine

Direct injection type, compression, ignition type running at required design speed and fitted with flywheel, coupling and guard, automatically controlled starting motor, spring loaded stop control, oil bath air cleaner, exhaust silencer, fuel service tank with magnetic fuel level indicator, supports for fuel tank and cooling system regulator etc. as required.

- a) Direct injection type, compression, ignition type running at required design speed and fitted with flywheel, coupling and guard, automatically controlled starting motor, spring loaded stop control, oil bath air cleaner, exhaust silencer, fuel service tank with magnetic fuel level indicator, supports for fuel tank and cooling system regulator etc. as required.
- b) The engine shall be capable of operating on full load continuously for a period of six hours at site elevation. The engine shall have speed governor to control the engine speed within 4 1/2 % of its rated speed under any condition of the loading. Any manual device fitted to the engine which could prevent type engine from starting shall return automatically to the 'normal position.
- c) Cooling system of the engine shall conform in all respects to specifications of Rules of TAC.
- d) Fuel tank shall be of welded steel conforming relevant Indian Standard. The tank must be mounted above engine fuel pump to provide a gravity feed. The tank must be fitted with a magnetic indicator showing the level of the fuel in the tank. The capacity of the tank shall be as follows:

Extra light hazard: 3 Hrs. full load running.

light hazard: 4 Hrs. full load running.

Extra high hazard: 6 Hrs. full load running.

Fuel feed pipes shall not be soldered and plastic tubing shall not be used.

e) Starting Mechanism

Two separate methods of starting shall be provided as follows:

- i. Automatic starting by means of a battery powered electric starter motor having repeat start facilities, initiated by a fall in the pressure in water supply pipe to sprinkler installation.
- ii. Manual starting by an electric starter motor.
- f) Control panel shall comprise of the following:
 - i. One pressure switch.
 - ii. One electronic calibrated relay
 - iii. One starter repeater relay push button operated switch for manual starting

g) Batteries

Two separate 24 volt heavy duty starter batteries of repeated in wood tray including inter- battery connectors and end term shall be supplied.

h) Battery Charger

Wall mounted battery charger with air cooled transformer and wave grid connected rectifier, suitable for operation single phase AC supply shall be also be supplied.

- i. The diesel engine and pump set shall be supplied with fabricated bed plate to carry pump and engine.
- ii. Suitable cushy foot mounting for vibration isolation shall be supplied.

1.6 Spare Parts

The following minimum spare parts shall be supplied with the engine.

Fuel Filters, elements and seals: Two sets

- a) Lubricating Oil Filters, Elements: Two sets and Seals.
- b) Engine joints, Gaskets and Hoses: One set
- c) Injector Nozzles: Two
- d) Piston Rings for each Cylinder: One set
- e) Exhaust and inlet valve: One

Pumps and motor/engine shall be mounted on a common base frames fabricated from M.S. Structural and placed on suitable concrete foundations with the help of Dunlop Cushy- foot mountings (Anti-vibration pads) to avoid vibrations. The Anti-vibration pads shall be of heavy duty type.

1.7 Pressure Gauges

All pressure gauges shall be of dial type with Bourbon tube element of SS 316. The gauges shall be of reputed make. The dial size shall be 150mm dia. and scale division shall be in metric units marked clearly in black on a white dial. The range of pressure gauge shall be 0 to 14 Kg./cm. All pressure gauges shall be completed with rubber isolation cock, nipples, tail pipes etc.

1.8 Pressure Switch

- a) The pressure switch shall be Industrial type single pole double throw electric pressure switch designed for starting or stopping of equipment when the pressure in the system drops or exceeds the pre-set limits. It shall comprise of a single pole change-over switch, Belows element assembly.
- b) All the pressure switches shall have 1/4 B.S.P. (F) inlet connection and screwed cable entry for fixing cable gland.
- c) The Electrical rating of the switch shall be as under:

1.9 Switchgear

The main switch main switch board cubicle panel shall be of floor mounted type, totally enclosed, dust and vermin proof made from 14 SWG M.S.Sheet of suitable size duly painted with one coat of anti-corrosive paint and two coats of synthetic enamel paint of approved make and shade with stove enameled finish. The cubicle shall comprise of the followings:

- a) Incoming TPN fuse switch unit of required capacity.
- b) Outgoing TPN fuse switch unit one for each mortar.
- c) Aluminum Bus bar of suitable capacity.
- d) Fully Automatic 'STAR DELTA' starter suitable for the motor H.P. with Push Buttons, and ON/OFF indicating light one for each motor. Jockey pump to have DOL Starter.
- e) Single phasing preventers one for each motor.
- f) 95 MM² Panel Type Ampere meters - one for each motor complete with CTs.
- g) 150 MM² Panel type volt meter on incoming main with rotary selector switch to read voltage between phase to neutral and phase to phase.
- h) Three noon phase indicating lamps.
- i) Rotary switch for manual/auto operations.

- j) All colour coded internal and inter-connecting wiring from incoming main to Bus bar, switch board panel and power/control cables from Switch board cubicle to motors engine and batteries etc. in all respect.

All switchgears and accessories shall be of approved make to relevant IS Codes and to the satisfaction of Engineer-in-charge/ Consultant and rating of all equipment must match the KW of motors quoted and as per T AC rules. All electrical work to be carried out as per T AC and CPWD rules/specifications.

1.10 Earthing

- a) There shall be two independent earthing stations atleast three metres away from the pump room. Each earth electrode shall consist of copper earth plate 600mm x 600mm x 3mm thick including accessories and masonry enclosure with cover plate having locking arrangement. All electrical apparatus, cable boxes and sheath/armour clamps shall be connected to the main bar by means of branch earth connection of 25mm x 5mm copper strip. All joints in the main bar and between main bar and branch bars shall have the lapping surface properly tinned to prevent oxidation. The joints shall be riveted and sheathed. The main earthing strip shall be of 25mm x 5mm copper in 40mm dia. G.I. pipe from earth electrode as required.
- b) Earth plates shall be buried in a pit 1.2 x 1.2 M at minimum depth of 3 metres below ground. The connections between main bars shall be made by means of three 10mm brass studs.

1.11. Maintenance Manual

- a) On completion of the entire work and successful commissioning, Contractor shall hand-over four copies of maintenance manual of all equipment installed by him.
- b) 10.2 Maintenance manual shall include information relating to make, model no. year of manufacture and guarantee cards for all electrical and mechanical equipment with names of local suppliers or manufacturer's agents.

1.12. Measurements

- a) Pumping sets, and switch board cubicle shall be measured by number and shall include all item necessary and required and given in the specifications
- b) Earthing and power/control cabling shall not be measured separately but included in switchgear cubicle and shall include all items necessary and required to complete the work as per specification and relevant Indian Standards to the satisfaction of Engineer-in-charge/Consultant/Inspecting agency.
- c) Pressure Switches and Pressure Gauges shall not be measured separately but included in respective pumping sets and shall include all items necessary and required to complete the work to the satisfaction of Engineer-in-charge/Consultant.

1.13. INSPECTION & TESTING

The Consultants/Clients have the right to inspect the plants, equipments and materials at manufacturer's work or at site at any stage and reject the material that is substandard or does not meet the requirements of the specification and codes. The contractor shall provide at his cost at site and elsewhere instruments and appliances for testing and equipments and installation at various stages of manufacturing/installation. These instruments shall be got tested and calibrated for their accuracy and performance from the approved institutions

The inspection and testing carried out by the Consultants/Clients/Third party does not relieve the contractor of their responsibility of carrying out routine inspection during each stage of procurement, manufacture and installation and also meeting the intents and requirements of the specification and statutory requirements

All equipments and the installation to be tested in the presence of the Consultants/Clients after carrying out necessary rectification, adjustments and balancing. Four sets of test readings should conform to the specification, equipment data, standards and codes.

CPVC PIPE SPRINKLER SYSTEM

1. CPVC pipes shall comply with IS 16088, bearing ISI mark and fittings shall comply with the IS 16534 with regard to its fabrication and installation and shall preferably bear ISI mark.
2. When CPVC pipe is used in combination systems utilizing internally coated steel piping and CPVC piping, the steel pipe shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and lubricants use for fabrication of the steel piping shall be compatible with CPVC materials.
3. When CPVC pipe is used in combination system utilizing steel pipe that is not internally coated and CPVC piping, no additional evaluations are required. Cutting oils and lubricants use for fabrication of the steel piping shall be compatible with CPVC materials.
4. Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.
5. Other construction materials, such as paint, electrical and communication wiring, thread sealants, gasket lubrication shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.
6. Maximum pressure in the installation with CPVC pipes shall not exceed 12 bar.
7. The piping systems must be laid out to ensure the piping is not closely exposed to devices that generate heat in excess of 150°F (65°C), such as light fixtures, ballasts and steam lines.
8. Necessary fittings to be arrived based on the layout given.
9. Necessary **sealant** to be used to fix the fittings and the same should be withstanding the pressure as per the NFPA & IS.
10. Necessary support to be considered with threaded rod, clamps & Screws.
11. Necessary Fittings to be considered - Reducing bush, Elbows, required ELBOWs, Reducers ELBOW, TEE, Reducer TEE, CAP, Sprinkler TEE, Sprinkler Elbow, Sprinkler Adaptor, Female Adaptor, Male Adaptor.
12. Piping must always be installed in strict accordance to the manufacturer's System Design and Installation Manual, including product storage and handling, joining methods, supporting and bracing, expansion and contraction allowance and testing, etc. National Fire Protection Association (NFPA) Standards 13, 13D, and 13R.
13. All socket type joints shall be assembled with solvent cements that meet or exceed the requirements of ASTM F493. Safe handling of solvent cements shall be in accordance with ASTM F402. Solvent cement shall be certified by NSF International for use with potable water, and approved by the manufacturers. The solvent cements shall be approved for use with CPVC pipe and fittings
14. Proper trained execution team to be handle the project.
15. Flange to be considered to connect with metal tap off.

LIST OF APPROVED MATERIALS

LIST OF APPROVED MAKES

The contractor shall quote for the best of the materials specified below with ISI mark wherever applicable. The contractor shall obtain prior approval from the Bank / Architect before placing order for the specific materials agencies. In case of non availability of any of the approved/specified materials/agency during the execution of the work, the Bank /Architect may approve suitable equivalent brand/agency and his decision shall be final and binding on the contractor and the price variations If any shall be adjusted accordingly.

LIST OF APPROVED MAKE

| | | |
|--|------------------------------|---|
| | Pumps | KIRLOSKAR/ LUBI |
| | Motors | ABB/KIRLOSKAR/ CROMPTON/KSB |
| | Diesel Engine | KIRLOSKAR /LUBI |
| | Pipes | JINDAL/ TATA |
| | Valves / NRV | NORMEX/AUDCO |
| | Pressure Switch: | INDFOSS/DANFOSS |
| | Pressure Gauge | GURU |
| | Cable | POLYCAB/NATIONAL/GLOSTAR / RPG/ FINOLEX |
| | Wrapping and coating | PYPKOTE / RUSTECH |
| | Hydrant valve/Hose drum | MINIMAX / NEWAGE/SAFEX/AAG/LIFEGUARD |
| | Hose | NEWAGE / CRC/SAFEX/AAG |
| | Switch board panels | FACTORY FABRICATED WITH APPROVED ACBs, SFUs / MCCBs/ELCBs |
| | Contractors / Starters | L& T / SIEMENS / SCHNEIDER / GE |
| | MCB, DBs | MDS/ LEGRAND / HAGER/ L&T |
| | Switch fuse units | GE / L&T / SIEMENS |
| | Moulded case circuit breaker | L&T / LEGREND / MERLIN GERIN |
| | Moulded case circuit breaker | ABB / MERLIN GERIN |
| | SORINKLER FITTING/PIPE | BLAZE MASTER/ASTROL |
| | SPRINKLER BULB | SAFEX/TYCO/NEWAGE |
| | PIPE PAINT | BERGER/ASIAN |



GENERAL SPECIFICATIONS

LIST OF ENCLOSURES

| ANNEXURE NO. | PARTICULARS | TICK IF ENCLOSED |
|--------------|---|------------------|
| Proforma - 1 | General Information of the Organization | |
| I | Documentary Proof showing Registered Address | |
| II | EMD or Valid certificate from MSME and NSIC issued by Govt. of India | |
| III | Documentary Proof showing Year of Establishment of the Firm | |
| IV | Evidence showing Constitution of the Firm | |
| V | Certified Copies mentioning Name of Proprietor / Partner / Director of the Firm | |
| VI | Document showing appointment of Authorized Signatory of the Firm | |
| VII | Document showing details of Registration with Registrar of Firms / Companies | |
| VIII | Certificate of being registered as MSME Organization, if mentioned. | |
| IX | Document showing experience in the field | |
| X | Audited Balance Sheet & Profit & Loss Statement for FY 2020-21, FY 2021-22 & FY 2022-23. | |
| XI | Copy of Cancelled Cheque | |
| XII | Copy of Solvency Certificate issued by Scheduled Commercial Bank | |
| XIII | Documentary Proof of Registration in Various Govt. Authorities (PAN, GSTIN, Labour License, ESI & EPF) | |
| XIV | Copies of Income Tax Returns of last three financial years | |
| XV | FORM – A along with Copies of Work Order / Completion Certificate of the Works Completed in last 5 years to satisfy eligibility criteria mentioned in the Notice. | |
| XVI | FORM – B along with Copies of Work Order under Execution issued by PSBs / Central Govt. Departments / State Govt. Departments | |
| XVII | FORM – C | |
| XVIII | FORM – D | |
| XIX | FORM – E | |
| XX | FORM – F | |
| XXI | Self Declaration – No Blacklisting | |

NOTE: APART FROM ABOVE, ANY OTHER DOCUMENT DEMANDED BY BANK OR THE TENDERER THINKS IT IS NECESSARY TO SUBMIT TO SATISFY PRE-QUALIFICATION CRITERIA HAS TO BE ENCLOSED WITH TECHNICAL BID

Place:

SIGNATURE

NAME & DESIGNATION

Date :

SEAL OF ORGANISATION