

TENDER DOCUMENT

FOR

**RENOVATION OF GUEST HOUSE IN NIB
CAMPUS, NOIDA.**

VOLUME -III

SPECIFIC CONDITIONS OF CONTRACT

Tender No: 02/NIB/2017-18/ Engg. (C/E)

APRIL - 2017



NATIONAL INSTITUTE OF BIOLOGICALS

(Ministry of Health & Family Welfare)

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National Institute of Biologicals
(Ministry of Health & Family Welfare, Govt. of India)
Plot No. A-32, Sector -62, Noida - 201 309.

SPECIFIC CONDITIONS OF CONTRACT (SCC)

SECTION 1- GENERAL

General:

The following Specific Conditions of Contract shall be read in conjunction with General Conditions of Contract. If, there are any provisions in these Specific Conditions of Contract which are at variance with the provisions in the above mentioned documents, the provisions in these **Specific Conditions of Contract** shall take precedence.

1. Scope of Contract:

The scope of work comprises of Project constitutes “Renovation of Guest House” in NIB Campus, Noida by carrying out Civil, Electrical, Plumbing and other related works as per bill of quantity.

2. Contractor’s General Responsibilities:

(a). Execution of works:

The Contractor shall, subject to the provisions of the Contract, and with due care and diligence, execute and complete the Works & remedy any defects therein in accordance with the Contract. The Contractor shall provide all labour, including the supervision thereof, materials, Constructional Plant and Machineries and all other things, whether of a temporary or permanent nature, required in and for such execution, completion, maintenance and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

If, the contractor finds any discrepancy in the drawings or between the drawings, bill of quantities and specifications, he shall immediately and in writing refer the same to the Engineer for clarifications who shall decide the matter.

The successful contractor is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the bill of quantities and rates instructions in respect of such additional items

and their quantities will be decided as per the provision of the contract and issued in writing by NIB.

The Contractor must bear in mind that all the work shall be carried out strictly in accordance with the specifications as given in these documents and also in compliance of the requirements of the local public authorities and to the requirements/ satisfaction/ direction of NIB and no deviation of any account will be permitted.

The contractor shall have to use materials from the makes/ manufacturers specified in the list of materials of approved brand and/or manufacture contained in the contract documents and as approved by the Engineer. Wherever different pattern/Design/Quality of materials with same specification/ make as specified in the contract, is available in the market, NIB will approve the pattern/ Design/ Quality of the material/ item which shall be final and binding on the contractor. The contractor shall supply samples of all the materials/fittings/fixtures proposed to be used in the work and obtain approval of the Engineer. These samples shall be retained at site till completion of the work. If, subsequently it is found that approved material upon testing does not meet the requirement as specified in the contract the contractor shall get approval of alternate material.

(b). Samples & Approval of Materials:

- i. NIB will not supply any materials required for execution of the Works under this Contract. The Contractor must, therefore, make his own arrangements for timely procurement of various materials including steel and cement.
- ii. Prior to ordering any equipment/ material/ system, the Contractor shall submit to the NIB the catalogues, along with samples from approved list of manufacturers. No material shall be procured without written approval of the NIB.
- iii. Prior approval of each and every material including tiles, wooden flooring, cement, aggregate, bricks etc. or any other fittings & fixtures shall be taken by the contractor from NIB. Samples for all the materials to be used in the work shall be got approved from NIB before their bulk procurement. Samples approved shall be kept in the sample room till the completion of the work.
- iv. All materials used on the Works shall be new and of the approved quality and make available, conforming to the relevant specifications of the contract. Prior approval shall be obtained in writing from the NIB all materials proposed and when necessary, approved samples duly identified and labeled shall be deposited with NIB and shall be kept

in the sample room at Site. List of approved make indicates make/manufacturer generally acceptability. Final choice of make/manufacturer of material & models shall be with NIB.

(c). Approved makes for materials and vendor list:

The contractor shall procure materials amongst the vendors as mentioned in the vendor lists enclosed. In case a material is not available from any of the vendors in the enclosed vendor lists, the contractor may intimate and submit details of source from where the contractor wishes to procure the material, along with complete details and the particular material shall be got approved from the Engineer before procurement.

(d). Safety in Construction:

The contractor shall employ only such methods of construction, tools and plant as are appropriate for the type of work or as approved by NIB.

The contractor shall take all precautions and measures to ensure safety of works and workmen and shall be fully responsible for the same. Safety pertaining to construction works such as excavation, centering and shuttering, trenching, blasting, demolition, electric connections, scaffolds, ladders, working platforms, gangway, mixing of bituminous materials, electric and gas welding, use of hoisting and construction machinery shall be governed by the Safety code, relevant safety codes and the direction of NIB.

(e). Adequacy, stability and safety:

The Contractor shall be fully responsible for the adequacy, stability and safety of all site operations and methods of construction, the contractor shall ensure that all safety norms are followed as per contractual and other statutory requirements.

(f). Storage, Cleaning and Dewatering:

The Contractor shall at all the times during construction keep the Site clean and free from all debris and unwanted materials on a daily basis as per instructions of NIB.

Storage of materials shall be in an organized manner and in proper compartments as directed by the NIB. Storage on suspended floors shall not be permitted unless specifically approved in writing by the NIB for specific materials in specific locations and in approved manner.

Regular cleaning operations shall be undertaken to remove all dust, debris, waste materials etc. A cleaning schedule shall be maintained.

The Contractor shall make his own arrangement for storage of those materials, which can be accommodated at site. Contractor shall be fully responsible for safe custody of the same. Materials shall be considered as "Delivered at Site" only after the physical presence of materials at site are verified by the Engineer. Materials elsewhere shall not be considered as "Delivered at Site."

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

Any expenditure incurred by the Contractor in fulfillment of his obligations under this sub-clause shall be deemed to have been included in the financial bid and subsequent contract.

3. Watch & Ward and Lighting:

The Contractor shall throughout the execution and completion of the Works and the remedying of the site and the Works and the remedying of any defects therein have full regard for the safety of all persons entitled to be on the site and keep the site and the Works in an orderly state to avoid any accident or danger and provide safety measures, lights, guards, fencing and barricades where ever necessary or required by NIB, or by any duly constituted authority, for the execution and for the protection of the Work, and/or for the safety and convenience of the public or others and take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to person or property of the public or others resulting from pollution, noise and other causes etc. at his own cost.

4. Care of Works:

From the commencement to the certified completion of the whole of works, the contractor shall be responsible for the care, safety and maintenance of the works executed under the contract thereof and of all temporary works. In case of any damage/ loss or injury shall happen to the works or to any part thereof or to any temporary works from any cause whatsoever save and except the expected risks, the contractor shall at his own cost repair and make good the same, so that on completion the works shall be in good order and condition in conformity to every respect with the requirements of the contract. The contractor shall also be liable for any damage to the works occasioned by him including his subcontractors in the course of any operations carried out by him for the purpose of completing any outstanding work and complying with his obligations under the Contract. In case of failure on the part of the contractor the damage/loss/ injury shall be made good by NIB at the risk and cost of the contractor.

5. Contractor's Superintendence:

(a). The contractor shall be solely responsible for the means, methods, techniques sequence and procedure of construction. The Contractor shall be responsible to see the completed work complies accurately with the Contract requirements. The Contractor shall provide all necessary superintendence during the execution of the Works as per contractual provisions.

(b). Contractor's Representative for Execution & Coordination of Works:

The Contractor shall ensure his presence at site all times during working hours throughout the course of the Contract or depute a Competent representative who shall be empowered to receive instructions from the Engineer in respect of all matters likely to arise in connection with the execution & coordination of the works at the site. Contractor's Authorized Representative shall take joint measurements and sign the measurement books/bills. Any direction, explanations, instructions or notices given by NIB to such representative shall be held to be given to the Contractor. In case of absence of said Representative other alternative representative should also be mentioned having same responsibilities.

The contractor should submit curriculum vitae (CV) of the key personnel proposed to be deployed at site as per Schedule "F" of GCC for supervision and execution of work.

The contractor under normal circumstances would not be allowed to replace the key personnel during the execution of the contract. However, for any reasons, due to unavoidable circumstances if it becomes necessary in the interest of the project to replace any one / all the above key personnel the contractor must submit the CV of the new personnel (having qualifications and experience as per requirement of the contract) to NIB for their approval. A list of all technical and key personal staffs must be submitted to the NIB with their area of work/ responsibility with verified signature and the link persons to receive the instructions at site (in case the main person was not found at site) during the inspection by representative of NIB. Any staff of contractor found incapable/ unsuitable to execute the assigned work shall be replaced by the Contractor if desired by the NIB.

(c). Contractor's Employees:

The Contractor shall employ competent Engineering staff/ technical assistants/ technicians who are qualified, skilled and experienced in their respective trades, to ensure proper supervision, quality & output of the work they are required to supervise. No child labour shall be employed on the work. All the skilled semi-skilled and unskilled labour shall work under the sole guidance of the contractor/his representative.

(d). Removal of Contractor's Employees:

The Contractor shall on the direction of NIB immediately remove from the work any person employed thereon by him who may, in the opinion of NIB has misconducted himself and such person shall not be again employed on the works without the permission of NIB.

(e). Unauthorized Persons:

No unauthorized persons shall be allowed on the site. The contractor shall provide complete security arrangement for the campus during construction to avoid trespassing. The Contractor shall ensure all such persons are kept out and shall take steps to prevent trespassing. However the contractor will make sure to provide free access at any time for NIB to the site and other working places.

6. **Compliance with Statutes, Regulations etc.:**

The contractor shall conform to the provisions of all statutes, ordinance, laws, acts of the legislature relating to the works, and to the regulations and by-laws of any local or other duly constituted authority and of any water, electric supply and other companies and/or authorities with whose systems the structure is proposed to be connected. The Contractor shall keep NIB indemnified against all fines or penalties or liability of every kind for breach of any such statutory ordinance, law act of the legislation, regulations, and byelaws as aforesaid.

The contractor shall before making any variations from the drawings or specifications that may be necessitated by such regulations, give to the Engineer written notice, specifying the variation proposed to be made and the reasons for making it and apply for instructions thereon. The contractor will not execute any work without written permission from NIB.

The contractor shall bring to the attention of NIB any specific requirement of the local authorities or any notice required for execution by virtue of such acts, regulations or bye-laws of such authority, or public office. All fees that may be chargeable in respect of these works shall be reimbursed by the NIB on production of authorised receipts.

7. **Setting out:**

The contractor shall be responsible for the true and proper setting-out of the Works in relation to original points, lines and levels or reference issued by NIB or in writing and for the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the works, and during defects liability period, any error shall appear or arise in the position, levels,

dimensions or alignment of any part of the Works, the Contractor, on being required to do by NIB shall at his own cost, rectify such error to the satisfaction of NIB. The checking of any setting out or of any line or level by the Engineer not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve the benchmarks; sight-rails, pegs and other things used in setting-out the Works. Any rectification works required should be done by the Contractor at his own cost.

8. Quality of Materials, Workmanship and Test:

(a). All the materials used in the work shall be subjected to the mandatory tests as prescribed in the specifications detailed in Schedule F of the General Conditions of Contract and other specifications referred to in the contract and workmanship shall be the best of the respective kinds described in the Contract and in accordance with the Engineer instructions and shall be subjected from time to time to such tests as NIB may direct at the place of manufacture or fabrication or on the Site or at an approved testing laboratory. The source of supply and / or manufacturing within/ outside India may be inspected by NIB or any representative as nominated by NIB. The expenditure on this account is deemed to be included in the rate quoted.

The contractor shall upon the instruction of the NIB representative furnish him with documentation to prove that the materials & goods comply with the requirements of contract and for requirement stated above. The Engineer may issue instruction in regard to removal of material from site or any work, if these are not in accordance with the contract. The contractor shall provide such assistance, instruments, machinery, labour and materials as are required for examining, measuring, sampling, testing of material or part of work.

NIB may carry out **Third Party Quality Assurance /Audit** by an independent agency/ individual/firm/institute at any time. The agency will be permitted and offered all support related to site inspection by the Contractor. Observations/ discrepancies noticed by third party quality assurance/audit shall be attended by the contractor at his own cost.

(b). Samples:

i) All samples of materials and /or items of works in adequate numbers, sizes, shades & pattern as per specifications shall be supplied free of charge by the contractor without any extra charge. All other expenditure required to be incurred like conveyance for taking the samples for testing at the laboratory, packing, etc., shall be borne by the contractor. If the test results do not conform to the specifications and standards laid down, the materials shall be rejected, the contractor shall remove such materials from site. The laboratory for testing of samples shall be decided by the Engineer, whose decision shall be final and binding.

- ii) Contractor shall submit Samples to NIB for approval. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site, detailed literature / test certificate of the same shall be provided to the satisfaction of NIB. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalogue numbers and the use for which intended and otherwise as the NIB may require to review the submittals for the limited purposes required by paragraph (d) below. The numbers of each sample to be submitted will be as specified in the Specifications, or as shall be specified by NIB.
- iii) Submittal Procedures:
1. Before submitting each Sample, Contractor shall have determined and verified all materials with respect to intended use, fabrication, shipping, handling, storage, assembling and installation pertaining to the performance of the Work and All information relative to Contractor's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programmes incident thereto.
 2. Each submittal will bear a specific written indication that Contractor has satisfied Contractor's obligation under the Contract Documents with respect to Contractor's review and approval of that submittal.
 3. At the time of each submission, contractor shall give NIB specific written notice of such variations, if any; that the sample submitted may have from the requirements of the contract document. Such notice shall be separate from the submittal and in addition shall cause a specific notation to be made on each sample submitted for review and approval of each such variation.
- iv) Review and Approval:
1. Sample shall be reviewed and approved only to determine if the items covered by the submittals will, after installation or incorporation in the work, conform to the information given in the contract documents and be compatible with the design concept of the completed project functioning as a whole as indicated by the contract documents, drawings.
 2. Review and approval will not extend to means, methods, techniques, sequences or procedures of construction. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make corrections required by NIB and shall submit as required new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections

- called for and by NIB on previous submittals.
3. Above referred review and approval of Samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Document unless Contractor has in writing called NIB attention to each such variation at the time of submission as specified above and received written approval of each such variation by specific written notation thereof incorporated in or accompanying the Sample approval; nor will any approval by NIB relieve Contractor from responsibility for complying with the requirements of contract.
 4. Only when the samples are approved in writing by NIB, the contractor shall proceed with the procurement and installation of the particular material / equipment. The approved samples shall be signed by NIB for identification and shall be kept on record at site office until the completion and acceptance of the work and shall be available at the site for inspection /comparison at any time. The contractor shall keep with him a duplicate of such samples to enable him to process the matter.
 5. For items of works where the samples are to be made at the site, the same procedure shall be followed. All such samples shall be prepared at a place where it can be left undisturbed until the completion of the project.
 6. NIB shall communicate his comments/ approval to the Contractor to the samples at his earliest convenience. Any delay that might occur in approving of the samples for reasons of its not meeting with the specifications or other discrepancies, inadequacy in furnishing samples of appropriate quality from various manufacturers and such other aspects causing delay on the approval of the materials/ equipment's etc., shall be ascribable to the account of the contractor. In this respect the decision of the NIB shall be the final.
- v) On delivery of the supplies of materials/equipment for permanent works at the site, the contractor shall specifically arrange to get the supply inspected by NIB and compared with the approved sample and his specific approval obtained before using the same in the work.
- vi) Cost of Tests:
The cost of making any test shall be borne by the Contractor as intended by or provided for the Contract or as found necessary by NIB for ascertaining whether the quality of materials intended to be used by the Contractor in the Works is acceptable, whether any finished or partially finished work is appropriate for the purposes for which it was intended to fulfill.

9. Absence of Specifications:

If the nomenclature of any item does not contain particulars of materials and works which are necessary for its proper execution, all such materials shall be supplied and item shall be executed by the Contractor without extra charge over the quoted rates and If the Contractor requires any information, he shall request in writing well in advance to commencement of the particular work to NIB who will clarify the issue within a reasonable time.

10. Obtaining Information's related to Execution of work:

No claim by the Contractor for additional payment will be entertained which in consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the works, nor will any misunderstandings or the obtaining of incorrect information or the failure to obtain information relieve him from any risks or from the entire responsibility for the fulfillment of the contract.

11. Access for Inspection:

Persons nominated by NIB shall at all reasonable times have free access to work and/ or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall extend necessary service to and their representatives every facility necessary for checking measurements, inspection and examination and test of the materials and workmanship.

12. Examination of Work before covering up:

(a) No part of the works shall be covered up or put out of view without the written approval of NIB and the contractor shall give due notice to NIB whenever any such work is or ready or about to be ready for examination and the NIB shall, examine and measure any work before it is covered up or put out of view.

(b) Uncovering and making openings:

The contractor shall uncover any part or parts of the works or make openings in or through the same as NIB may direct from time to time and shall reinstate and make good such part or parts to the satisfaction of the NIB at his own cost.

13. Assignment:

The contractor shall not, without the prior consent of NIB assign the Contract or any part thereof, or any benefit or interest therein or there under, otherwise

than by:

- A change in favour of the Contractor's bankers of any money due or to become due under the Contract, or
- Assignment to the Contractor's insurers (in case where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

The Contractor shall not sub-contract the whole of the Works. Also, the Contractor shall not subcontract any part of the works without the prior consent of NIB, except where otherwise provided under the Contract. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be fully responsible for the quality of the work executed and acts, omission and commission, defaults and neglects of any Subcontractor, his agents, servants or workmen as if these were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Such Permission may be granted only for the specialized work etc. and the decision of NIB shall be final.

14. Claims:

The contractor shall submit to NIB monthly statement giving full details of claims for any additional payments for extra or additional / substituted work ordered by NIB which he has executed during the preceding month, to which the contractor may consider himself entitled supported with analysis of rates being claimed failing which the contractor shall be deemed to have waived his right. NIB may authorize consideration of such claims on merits on production of sought out documents/ vouchers etc.

15. (a) Dates for Inspection & Testing:

The dates of Inspection & Testing, after receipt of written request by the Contractor, shall be mutually agreed by the contractor.

(b) Rejection:

If as a result of such inspection, examination or test of the works (other than a Test on Completion NIB shall decide that such material is defective or not in accordance with the contract he shall notify the contractor accordingly stating in writing his observations and reasons thereof. The contractor shall with due diligence make good the defect and ensure that the material complies with the Contract. Thereafter, if required by NIB, the tests shall be repeated under the same terms and conditions till satisfactory results are made available.

(c) Delivery of Materials and Equipment

The contractor shall be responsible for all materials and equipment brought at site for the purposes of the contract. Unless NIB directs, no material shall be brought to the site which is not required for execution of the work.

(d) Inspection & Testing and Re-inspection:

All deficiencies revealed by testing and inspection shall be rectified by the contractor at his own expense and to the satisfaction and approval of NIB. Rectified components shall be subject to re-testing till desired results are obtained.

(e) Inspection Reports:

The contractor shall provide NIB a copy of reports of all inspection and tests.

16. Physical and Virtual Completion of Work:

When the whole of the Work is physically and virtually complete and has satisfactorily passed required tests that may be prescribed under the Contract:-

- a) The contractor shall give a written notice to this effect within 5 days of completion alongwith an undertaking to rectify any defects that may be found during inspection. NIB shall jointly inspect the work with the contractor within 7 days of receipt of such notice.
- b) NIB shall inspect the works completed to see if they are in such a condition so as to be put to its proper or other intended final use and / or occupied without any short comings and no major or minor items of works are remaining which in the opinion of NIB will cause undue difficulties in satisfactory use/ occupation of the works.

17. Provisional Acceptance and Certificate of completion:**17.1 Provisional Acceptance and Issue of Certificate of Physical Completion of work:**

The work shall be deemed to have been physically completed and provisionally accepted after fulfillment of all the following by the Contractor.

- i) Physical completion of all works.
- ii) Submitting As-Built Drawings, Catalogues, Brochures, and Data Sheets, manuals in the form as directed by NIB.
- iii) Issue of Certificate of Physical Completion by the NIB.

17.2 Certificate of Final Completion:

The contract shall not be considered as completed until a Certificate of Final Completion has been issued by NIB stating that the Works have been completed to his satisfaction and remedying / rectifying of defects have been satisfactorily completed.

The composite work shall be treated as complete when all the components of the work are complete. The Certificate for Final Completion of the Composite

work shall be recorded by the NIB after obtaining/ recording of completion certificate of all the components.

17.3 **Certificate of Overall Completion:**

NIB shall give the Certificate for Overall Completion as per the following, whichever is later:

- Twenty-eight days after the expiration of the Defects Liability Period
OR
- If different Defect Liability Periods shall become applicable to different sections or parts of the Works, the expiration of the last such period
OR
- As soon thereafter as any works ordered during such period have been completed to the satisfaction of NIB.

18. The contractor shall give performance test of the entire work as per standards specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the tests.

19. The contractor shall maintain in perfect condition all works executed till the completion of the entire work allotted to him.

20. **Defect after completion:**

(a). General:

Any defect, shrinkage, settlement or other faults that may appear within the "Defects Liability Period" which in the opinion of NIB are due to materials or workmanship not in accordance with the contract, shall be rectified as per the directions in writing of NIB to the Authorized representative of the contractor within such reasonable time as shall be specified therein by the contractor, at his own cost. In case of default, NIB may employ any person's to amend and make good such defects, shrinkage, settlements or other faults and all expenses consequent thereon or incidental thereto shall be borne by the contractor. Such damages, losses and expenses shall be recoverable from the bills due or may be deducted from any money due to or that may become due to the contractor. If, no amount is available to the credit of contractor, NIB may recover the amount from the dues of the contractor from any other contract made by the Contractor with NIB.

(b). Execution of work of repair etc.:

Any defects, shrinkage, settlement or other faults which may appear or be noticed within the defect liability period, and arising in the opinion of NIB from materials or workmanship not having in accordance with the contract, shall upon the direction in writing of NIB and within such reasonable time as shall be specified therein and without any delay, be amended and made good or

replaced by the contractor at his own cost.

(c). Cost of Execution of Work of Repair, Etc.:

All such works shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of NIB, be due to the use of materials or workmanship not in accordance with the Contract, or due to neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract.

21. Works by Other Agencies:

NIB reserves the right to use premises and any portion of the site for the execution of any work not included in this contract which it may desire to have carried out by other persons simultaneously, and the contractor shall allow the reasonable facilities for the execution of such work, but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the other agency. Such work shall be carried out in a manner so as not to impede the progress of the works included in the contract, the contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.

22. Urgent Repairs:

If, by reason of any accident, or failure, or other event occurring to or in connection with the works, or any part thereof, either during the execution of the works, or during period of Defects Liability any remedial or other work or repair, shall, in the opinion of the NIB be urgently necessary for the safety of the Works and the Contractor is unable or unwilling to do such work or repair despite notice, NIB may employ and pay other persons to carry out such work or repair as the case may be and may consider necessary. If the work or repair so done by the other agency is the work which, in the opinion of NIB the Contractor was liable to do at his own expense under the Contract, all expenses incurred by Other agency in so doing shall be recoverable from the Contractor by NIB, or shall be deducted by NIB from any monies due or which may become due to Contractor.

23. Plant Temporary Works & Materials:

(a.) Plant, etc. Exclusive use for the Works:

All Constructional Plant, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof except for the purpose of moving it from one part of the Site to another, without the consent, in writing of NIB, which shall not

be unreasonably withheld.

(b.) **Removal of Plant etc.:**

Upon completion of the Works, the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor, within 7 (Seven) days of obtaining the completion certificate/ Virtual completion of the work.

24. Reports by Contractor:

The Contractor shall submit activity wise bar charts, indicating the duration of various subheads of the work, for the complete work within 15 (Fifteen) days of award of work or as per Clause 5 of the GCC, whichever is earlier, for approval by NIB.

25. Every care has been made to include all the aspects/terms and condition in these documents. However, during execution, if any issue arises, which has not been included in these documents then standard norms/ rules & regulations/ terms & conditions as prevalent in CPWD shall be followed which shall be binding on both the parties.

26. Audit and Technical Examination:

NIB shall have the right to cause Third Party Quality Assurance, Audit and Technical Examination of the works and the final bills of the contractor including all supporting vouchers, abstracts, etc. to be made as per payments of the final bill and if as a result of such Third Party Quality Assurance, Audit and Technical Examination the sum is found to have been overpaid in respect of any work done by the contractor under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for NIB to recover the same from the Security Deposit or Performance Security of the contractor or from any dues payable to the contractor. If it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid.

The work comes under the purview of CVC and as such all orders and instructions issued by CVC are applicable to this work. In the case of Technical Examination by CVC, consequent upon which there is a recovery from the contractor, recovery shall be made with orders of NIB whose decision shall be final.

All action under this clause shall be initiated and intimated to the contractor within the period of twelve months from the date of final completion.

27. Miscellaneous:**(a.) Safety Regulations:**

Contractor shall be fully responsible for the safety of his Employees / Visitors/ Contract Labour / Sub-Contractors Labour. The Contractor shall provide first-aid box readily available at site. The Contractor shall provide all safety measures as per labour safety rules applicable.

(b.) Labour Laws:

The Contractor shall strictly adhere to all labour laws prevailing in the region. The contractor shall make timely payment of wages of his labour and the wages paid to the labour shall be equal to or more than the minimum wage prevailing at the time of payment. The Contractor shall comply with all applicable labour legislation, maintain labour records including payment made to the workers and obtain licence for engaging workers for the work as required under the labour laws.

(c.) By-Laws of Statutory Authorities:

The Contractor and his labour shall not violate municipal /sanitation /health or any other byelaws.

(d.) Tax Deduction at Source:

All Taxes and surcharge as applicable on date shall be deducted from the amount due to the Contractor towards the value of the work done. TDS certificate thereof shall be issued to the Contractor.

(e.) General Lighting and Securities:

The Contractor shall, throughout the execution, completion and remedying of the defects, provide and maintain at his own cost all lights, guards, fencing, barricading, warning signs and watch post, when and where necessary or directed by the Engineer for the protection, safety and convenience of the workers/ public/ or others.

(f.) Delay in starting the work:

No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land, encroachment or in the case of clearance of works, on account of any delay in according sanction to estimates in issue of drawings, decisions etc. However, the extension of time shall be granted as per relevant conditions of Contract.

(g.) Site instruction book:

For the purpose of quick communication between Engineer and the Contractor or his representative, site instruction book shall be maintained at site as described below:

Any communication, relating the works may be conveyed through instructions in the site instruction book. Such a communication from Engineer to the Contractor shall be deemed to have been adequately served in terms of the contract once the entries are made and signed by the authorised representative of the contractor. For this purpose the contractor should authorise one of his employees on the site itself. Site instruction book shall have machine numbered pages and shall be carefully maintained and remain under custody of Engineer. The contractor can also avail of the site instructions book for urgent communication with - Engineer. Any instruction which NIB may like to issue to the Contractor may be recorded by NIB in site instruction book.

- (h.) **Signage-Deleted**
- (i.) **Cutting of Trees: - Deleted**
- (j.) The contractor shall have adequate generators of required capacity as per site requirement as stand by arrangement.
- (k.) The temporary connection for electric line and water line from local existing points in the building shall be taken by the contractor and who will bear the expenditures as per GCC.
- (l.) No idling charges or compensation shall be paid for idling of the contractor's labour, staff or P&M etc. on any ground or due to any reason whatsoever.
- (m.) The Contractor shall mobilize and employ sufficient resources for completion of all the works within the stipulated time period as per agreement and as indicated in the approved Bar Chart/ Network. No additional payment will be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by NIB.

28. Co-ordination Meetings:

The Contractor shall be required to attend co-ordination meetings with NIB and the other Contractors during the period of Contract as intimated by NIB. All costs incidental to such interaction shall be to the Contractor's account and no claim will be entertained by NIB on this account.

29. Site Management:

- a) Contractor's Working Area
Suitable working space will be provided by NIB to the Contractor as per site conditions and availability.

Before commencement of the work, the Contractor shall obtain approval of the Engineer the location of cement store, tiles etc. shall from time to time take instructions from the Engineer regarding collection and stacking of materials at the site.

No building material shall be stacked on areas where other buildings, roads, services or compound wall or any other structure are to be constructed.

- b) Contractor's Labour Camp
The Contractor shall make arrangements at his own expense for labour camp/ accommodation for labour and staff to be employed for execution of the work and their conveyance to Site. No workers/ staff shall be allowed to stay within the site. Proper ID Cards shall be got approved/authorized by the contractor from NIB to authorise the Contractor's staff and workers to enter the Site.
- c) Temporary Barricading
The Contractor shall at his own expense, erect and maintain in good condition temporary barricades all around the working area, as per directions of NIB.
- d) The contractor shall make, till completion of the project arrangements for/of:
- i. Proper security, safety, transportation, manpower, lighting arrangement for execution of works at night.
 - ii. Proper barricading around site so that surrounding area is made free from disturbances.
- e) Restriction in work areas.
- (a). The contractor must see the site of the work, its approaches carefully before tendering, No claim of any sort shall be entertained on account of any site conditions.
 - (b). Some restrictions may be imposed by NIB authorities or its security staff etc., on the working and/or movement of labour, materials etc. The contractor shall follow all such restrictions/ instructions and nothing shall be payable on this account.
 - (c). The contractor is not permitted to erect the huts for labour at the site of work, the contractor will have to make his own arrangement to provide such accommodation elsewhere and nothing extra shall be paid on this account.
 - (d). The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards such as day and night boards, speed limit boards, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of the work.

30. Rates:

- a) The quoted rates shall be for complete items of work i.e. inclusive of material, labour, plant and machinery, tools and tackles, batching plant etc. including overhead charges, all taxes, duties, statutory charges/ levies applicable from time to time and others as specified etc., incidental works and all other charges for items contingent to the work, such as, packing, forwarding, insurance, freight and delivery at site, watch and ward of all materials & successful installation, testing & commissioning at site etc.
- b) The rate of all items of work, shall, unless clearly specified otherwise include cost of all labour, materials and all other inputs required in the execution of the item, including Octroi, Sales Tax and any other taxes.
- c) Unless otherwise specified in the schedule of quantities, the rate tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depth of the building and nothing extra shall be payable to him on any account.
- d) The rates for items of work wherein cement is used are inclusive of cost for curing.
- e) Royalty at the prevalent rates whenever payable shall have to be borne by the contractor on the boulders, metal, shingle, sand and bajri etc., or any other materials collected by him for the work direct to the revenue authority of the District/State Government concerned and nothing extra shall be payable on this account.

SECTION - 2- ADDITIONAL CONDITIONS & SPECIFICATIONS**(A) GENERAL - RELATING TO CIVIL, ELECTRICAL, PLUMBING etc.****1.0 General:**

The following Specifications of Contract shall be read in conjunction with General Conditions of Contract and Specific Conditions of Contract-General. If there are any provisions in these Additional Specifications of Contract which are at variance with the provisions in the above mentioned documents, the provisions in these Additional Conditions & Specifications of Contract shall take precedence.

2.0 The work shall be carried out in conformity with the relevant BOQ.

The contract items comprise of furnishing of all materials, equipment, labour & transportation etc. necessary to render the installation/ item fully operational as per the intent of specifications, including any necessary adjustment or corrections. Further the installation/ item shall be in conformity with local laws and manufacturer's instructions applicable.

3.0 Receipt and storage of materials:

- a. Cement bags shall be stored in store at as per sketch of CPWD specifications with weather proof roofs and walls.
- b. The contractor shall maintain and render proper account of all material brought by him to the site, consumed by him on the work and balance if any. In respect of steel reinforcement bars, theoretical consumption will be calculated diameter wise.

4.0 Procurement of Cement and Steel:

The procurement of Cement and Reinforcement Steel, and, their issue and consumption shall be governed as per conditions laid down hereunder.

4.1 Cement:

- (i) The contractor shall procure 43 grade Ordinary Portland cement conforming to IS 8112 / Portland Pozzolana Cement conforming to IS 1489 (Part I) as required in the work, from manufacturers as per list of approved makes.
- ii) In case the cement is not available from manufacturers as per list of approved makes, the tenderer may submit a list of names of cement manufacturers from which they propose to procure for use in the work

or from any other reputed manufacturer as per approved make list.

- iii) The supply of cement shall be taken in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor may be taken by the Engineer got tested in accordance with provisions of relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected, and it shall be removed from the site by the contractor at his own cost within a week's time of written order from NIB to do so.
- iv) The contractor shall supply free of charge the cement required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.

4.2 **Steel:**

- 4.2.1 Reinforcement Steel conforming to BIS specifications (latest edition) shall be procured directly from main manufacturers or their authorised dealers as per the approved list provided in the agreement. The manufacturer has to give a certificate that the material supplied is not a re-rolled product. Relevant vouchers & test certificates will be produced by the contractor. Re-rolled sections will not be allowed. Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The contractor shall take proper care to prevent direct contact between the steel and the ground/ water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per direction of the Engineer-in-charge. Steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made. Test certificates for each consignment of steel shall be furnished and further tests shall be got carried out from the authorized laboratory as per the directions of NIB, before incorporating the materials in the work
- 4.2.2 The contractor shall procure TMT bars of Fe415/Fe415D/Fe500/Fe550/Fe550D grade (the grade as per BOQ) from manufacturers as per list of approved makes.
- 4.2.3 The grade of the steel such as Fe 415/Fe 415D/Fe 500/Fe500 D/Fe 550 / Fe 550 D or other grade (the grade as per BOQ) to be procured is to be specified as per BIS 1786-2008. The TMT bars procured from Primary producers shall conform to manufacturer's specifications.
- 4.2.4 The contractor shall have to obtain and furnish test certificates to NIB in respect of all supplies of steel brought by him to the site of work.

- 4.2.5 Samples shall also be taken and got tested by NIB as per the provisions in this regard in relevant BIS codes such as IS 1786: 2008. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders of the NIB to do so.
- 4.2.6 The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 4.2.7 For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

Size of bar	For consignment below 100 tonnes	For consignment above 100 tonnes
Under 10 mm dia bars	One sample for each 25 tonnes or part thereof	One sample for each 40 tonnes or part there of
10 mm to 16 mm dia bars	One sample for each 35 tonnes or part there of	One sample for each 45 tonnes or part there of
Over 16 mm dia bars	One sample for each 45 tonnes or part there of	One sample for each 50 tonnes or part there of

- 4.2.8 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.
- 4.2.9 The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in Clause 10 of the General Conditions of Contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in Clause 42 of the General Conditions of Contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.
- 4.2.10 The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of NIB.
- 4.2.11 Coefficient of weight i.e. the weight per unit length of the steel procured by the contractor shall be ascertained at site before using it and certified

by NIB. In case weight per unit length is beyond the rolling margin as laid down in the BIS: 1786, the steel will be rejected and shall be removed from the site of work within; a weeks' time from written order of the NIB to do so. In case weight per unit length is more than the standard coefficient of weight for the diameter, but is within the rolling margin, then the payment shall be made as per the standard weight per unit length, and, where the weight per unit length is lesser than the standard coefficient of weight for the diameter, but is within the rolling margin, the payment shall be restricted with respect to the actual weight per unit length of the diameter.

- 4.3 The actual issue and consumption of steel and Cement on the work shall be regulated and proper accounts maintained as provided in the Clause 10 of the General Conditions of Contract. The theoretical consumption of steel and cement shall be worked out as per procedure prescribed in Clause 42 of the General Conditions of Contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made
- 4.4 Steel and Cement brought to site and remaining unused shall not be removed from site without the written permission of NIB.
- 4.5 No payment shall be made to the contractor for any damage caused during the execution of work because of cause(s) not covered under Clause 43 of the Contract. The damage to work will be made good by the contractor at his own cost, and no claim on this account shall be entertained.
- 4.6 The Contractor shall maintain safe custody of materials brought to the site. The Contractor shall also employ necessary watch and ward establishment for the work and other purposes as required at his own cost.
- 4.7 For Cement and Steel and other materials, as prescribed, the quantities brought at site shall be entered in the respective material at site accounts and shall be treated as issued for maintenance of daily consumption.
- 4.8 Records of Consumption of Cement & Steel –
 - a. For the purpose of keeping a record of cement and steel received at site and consumed in works, the contractor shall maintain a properly bound register in the form approved by the NIB, showing columns like quantity received and used in work and balance in hand etc. The contractor's representative shall sign this register daily.
 - b. The register of cement & steel shall be kept at site in the safe custody of NIB during progress of the work. This provision will not, however,

absolve the contractor from the quality of the final product.

5.0 Conformity with Statutory Acts, Rules and Standards

- 5.1 The installation shall be in conformity with the Bye-laws Regulations and Standards of the local authorities applicable to the installations. But if the specifications call for a higher standard of materials and/or workmanship than those required by any of the above regulations and those required by any of the above regulations and standards, then the specifications shall take precedence over the said Regulations and Standards.
- 5.2 However, if, the specifications required something, which violates the Byelaws and Regulations, then the Bye-laws and Regulations shall govern the requirement of such installation.
- 5.3 Indian Standards: The System / Components shall conform to relevant Indian standards wherever they exist and to the National Building Code Amended up to date.
- 5.4 Nothing in these Specifications shall be construed to relieve the contractor of his responsibility for the design, Manufacture and installation of equipment with all its accessories in accordance with applicable statutory regulations and safety codes in force.

6.0 Manufacturer's Instructions:

Where manufacturers have furnished specific instructions relating to the materials and equipment used, covering points not specifically mentioned in these documents, manufacturer's instructions shall be followed with the approval of NIB.

7.0 Inspection and Testing:

- 7.1 The Engineer reserves the right to request inspection and testing at manufacturer's Works at all reasonable times during manufacture of items for this Contract.
- 7.2 The Engineer his authorised representative shall have full power to inspect the materials and workmanship at the Contractor's Works or at any place from which the materials or equipment is obtained. Approval by NIB, of any material or equipment shall in no way relieve the Contractor of his responsibility for meeting the requirements of the specifications. All incident expenditure like travelling, boarding and lodging etc. shall be borne by the contractor.
- 7.3 Routine and typical tests for the various items of equipment shall be

performed at the Manufacturer's/Contractor's Workshop in the presence of Engineer his authorised representative, results recorded and test certificates issued.

- 7.4 After installation has been virtually completed, the Contractor shall carry out under the direction and in the presence of the representative of the Engineer such tests and inspections as have been specified, or as considered necessary to determine whether or not the requirements of the item, drawings and specifications have been fulfilled. In case the work does not meet the full intent of specifications and further tests after making require changes and as considered necessary shall be done again, the Contractor shall carry them out and bear the expenses thereof. If, tests fail to demonstrate the satisfactory nature of the installation or any part thereof, then no claims for the extra cost of modifications, replacement or retesting will be considered. The decision of the NIB shall be regarded as final as to what constitutes a satisfactory test.
- 7.5 The above general requirements as to testing shall be read in conjunction with any particular requirements specified elsewhere
- 7.6 The Contractor shall provide all necessary instruments, such as steel tapes, weighing machine, plumb bobs, spirit levels, hammers, micro-meters, smoke test machine and labour etc. for conducting tests.

8.0 Test Certificates:

The contractor shall submit test certificates for all the materials/ systems issued by government recognized inspection/office /manufacturer certifying the Equipment / Materials/ installation and its function are in agreement with the requirements of relevant specifications and accepted standards.

9.0 Quiet Operation and Vibration:

All equipment shall operate under all conditions of designed load without any sound or vibration, which is considered objectionable by NIB. Such conditions shall be corrected by the Contractor at his own expense. Decision of NIB shall be final in this regard.

10.0 Accessibility:

The Contractor shall locate all equipment, which require servicing, operation or regular maintenance in fully accessible positions. The exact location and size of access panels, required for each valve or other devices requiring attendance, shall be finalized and communicated to Engineer well in time, to facilitate working by other agencies, failing this, the Contractor shall make all the necessary repairs and changes at his own expense.

11.0 Licenses and Permits:

The Contractor or the approved specialised agency engaged by them shall hold a valid plumbing, electrical, license issued by the Competent Authority under whose jurisdiction the work falls.

B) RELATING TO ELECTRICAL WORKS & INSTALLATIONS**1.0 General:**

- i. The electrical installations shall be in total conformity with the control wiring drawings prepared by the Contractor and approved by the Engineer & shall be connected and tested in the presence of an authorised representative of the Contractor and of NIB.
- ii. The responsibility for the sufficiency, adequacy and conformity to the Contract requirements of the electrical installation work lies solely with the Contractor.

2.0 Regulations and Standards:

The installations shall conform in all respects to Indian Standard Code of Practice for Electrical Wiring Installation IS: 732-1989 and as per latest CPWD General Specifications for Electrical Works as mentioned in Schedule 'F' of General Conditions of Contract. It shall also be in conformity with the current Indian Electricity Rules and regulations in so far as these are applicable to the installations. Wherever these Additional Specific Conditions call for a higher standard of material and/or workmanship than those required by any of the above regulations, then this Additional Specific Conditions shall take precedence over the said Regulation and Standards. External works & fire detection & alarm system works to be done as per CPWD specifications & relevant BIS codes.

3.0 Completeness of Bid:

All sundry fittings, assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections as required, and all other sundry items which are useful and necessary for proper assembly and efficient working of the various components of the work shall be deemed to have been included in the Bid rates and prices, whether such items are specifically mentioned in the Bid documents or not.

4.0 Works to be done by the Contractor:

Unless and otherwise mentioned in the Bid documents, the following works shall be done by the Contractor, and their cost shall be deemed to be included in the contract price:

- i. Cutting and making good all damages caused during installation and restoring the same to their original finish
- ii. Sealing of all floor openings provided for pipes and cables, from fire safety point of view, after laying of the same
- iii. Painting at site of all exposed metal surfaces of the installation other than pre-painted items like fittings, fans, switchgear/ distribution gear items, cubicle switch board etc. damages during erection, shall however be rectified by the contractor.
- iv. Testing and commissioning of complete installation.

5.0 Interrelationship of Services:

The Contractor shall keep a check at all stages and supervise at the point of connection the associated civil, electrical and plumbing works like overhead tanks, power supply and installation of makeup water connection, etc. In case of any discrepancy the same should be brought into the knowledge of Engineer in writing, all rectifications etc., required in future as a result of failure on the part of the contractor to do so, shall be carried out by the Contractor at his own expenses.

6.0 Cutting of structural members:

No structural member shall be chased or cut without the written permission of the Engineer.

7.0 Regulations and Standards:

The installations shall conform in all respects to Indian Standard Code of Practice for Electrical Wiring Installation IS: 732-1989 and as per latest CPWD General Specifications for Electrical Works as mentioned in Schedule 'F' of General Conditions of Contract. It shall also be in conformity with the current Indian Electricity Rules and regulations in so far as these are applicable to the installations. Wherever these Additional Specific Conditions call for a higher standard of material and/or workmanship than those required by any of the above regulations, then these Additional Specific Conditions shall take precedence over the said Regulation and Standards. External works & fire detection & alarm system works are to be done as per CPWD specifications & relevant BIS codes.

8.0 Tools for Handling and Erection:

All tools and tackles required for handling of equipment and materials at Site of work as well as for their assembly and erection and also necessary test instruments shall be the responsibility of the Contractor.

9.0 Conduit/ Trunking Layout:

Prior to the laying of the conduits and trunking, the Contractor shall examine/ study drawings and report to Engineer. If the Contractor desires to make any changes, then he shall submit proposed conduit layout plan to NIB and Engineer before execution, he shall get the same approved from NIB.

10.0 Manufacturer's Instruction:

Manufacturer's instructions for approved products shall be followed in consultation with NIB.

11.0 Materials & Equipment:

All materials and equipment shall be ISI marked and shall be of the make and design approved by NIB. Unless otherwise called for, only the best Grade of materials and equipment shall be used. The Contractor shall be responsible for the safe custody of all materials and equipment till these are taken over by NIB and shall insure them against theft, damage by fire, earth quake etc. A list of items of materials and equipment, together with a sample of each shall be submitted to NIB for his approval and shall be kept in the sample box.

12.0 Brochures and Data:

The Contractor shall submit the number of copies, as required, of all brochures /manufacturer's description data, operation manuals with internal complete circuit diagrams and other similar literature while obtaining the approval of product from NIB.

13.0 Approval of Shop Drawings:

The approval of shop drawings, schedule, brochures etc. by NIB/shall be an approval of general details and arrangements only and shall not relieve the Contractor from responsibility for any deviation from drawings or specifications unless he has in writing informed by NIB of such deviations at the time of submission of the drawings nor shall it relieve the Contractor from any responsibility for errors or omissions of any kind in the shop drawings.

14.0 Samples & Catalogues:

Contractor shall submit the samples & catalogue of the material, which are proposed to be used at Site as per the approved makes for obtaining approval of NIB.

15.0 Approval of Materials:

All materials used on the Works shall be new and of the approved quality, conforming to the relevant specifications. Prior approval shall be obtained in

writing from NIB for all materials proposed and when approved, sample shall be duly identified and labeled, it shall be deposited with NIB and shall be kept in the sample room at Site.

16.0 Inspection, Testing and Inspection Certificate:

- i. The NIB and their authorized representative shall have at all reasonable times access to the Contractor's premises or Works and shall be at liberty to inspect and examine the materials and workmanship during its manufacture or erection even when they are being manufactured or assembled at other premises.
- ii. The Contractor shall arrange all the materials and labour required for inspection of equipment or for any testing to be carried out at his/ manufacturer's works or at Site. Notice for such inspection/ presence for testing shall be given to the Engineer by the Contractor at least three (3) days in advance together with the routine test certificates of the equipment/ materials given by the manufacturer.
- iii. Notwithstanding approval of tests or equipment by the by Engineer, the Contractor shall be required to perform site tests and prove the correctness of ratings and performance of equipment/ machinery and materials supplied and installed by the Contractor as per the Contract specifications and conditions. NIB shall also have the power to order the material or work to be tested by an independent agency at the Contractor's expense in order to prove soundness & adequacy.

17.0 Schedule & Manner of Operation:

Time being the essence of this Contract, Contractor shall arrange for all required labour & material in sufficient quantities and at appropriate time, execute as per schedule for execution of work to meet the contract period requirement and so manage the operations that the work shall be completed in time as provided in the contract.

18.0 Conformity with Statutory Acts, Rules and Standards:

- i. All installations shall be in conformity with the Bye-laws, Regulations and Standards of the local authorities applicable. But if the specifications and call for a higher standard of material and/or workmanship than those required by any of the above Regulations and Standards, then the specifications provided in the contract shall take precedence over the said regulations and standards as per the directions of NIB.
- ii. However, if the specifications required something which violates the Bye-laws and Regulations, then the Bye-laws and Regulations shall govern the requirement of this installation as per the directions of NIB.

- iii. Indian Electricity Act and Rules: All electrical works in connection with installations of the system shall be carried out in accordance with the provision of the Indian Electricity Act, 1910 and the Indian Electricity Rules 1956, both amended up to date.
- iv. CPWD Specifications: as at Schedule 'F' of GCC.
- v. Indian Standards: The system/components shall conform to relevant BIS wherever they exist and to the National Building Code with latest amendments/addendums.
- vi. Nothing in these specifications shall be construed to relieve the Contractor of his responsibility for the design, manufacture and installation of the equipment with all its accessories in accordance with applicable Statutory Regulations and safety codes in force.

19.0 Checking of BOQ Quantities:

All quantities indicated in BOQ are tentative which may vary as per site conditions. Contractor has to verify quantities before procuring the materials. No payment shall be payable for quantity brought to site but not used.

20.0 Safe Custody and Storage:

Safe custody of all machinery and equipment dismantled, shifted & supplied by the Contractor shall be his own responsibility till the final taking over by NIB. The Contractor should, therefore, employ sufficient staff for watch and ward at his own expenses. NIB may, however, allow the Contractor to use the building space for temporary storage of such equipment, if such space is available.

END OF VOLUME - III