

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

**Department of Biotechnology,
Ministry of Science & Technology
(Govt. of India)**



TENDER NOTICE FOR AWARD OF ENERGY AUDIT AND VALIDATION WORK OF NABI MAIN CAMPUS AT KNOWLEDGE CITY, SECTOR-81, MOHALI-PUNJAB, INDIA

TENDER NO: NABI/7(29)/2014-Works

**Tender Issued from: 16-12-2016
Last date of receipt of tender: 26-12-2016 upto 3:00pm
Tender Opening date: 26-12-16 @ 3:30pm**

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NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE(NABI)

(Deptt. of Biotechnology, Ministry of Science & Technology, Govt. of India)
C-127, Industrial Area, Phase VIII, S.A.S. Nagar, Mohali-160 071. (Pb)
Website: www.nabi.res.in, Tel: 0172-2290300/140, Telefax: 0172-4604888

Tender Ref No: NABI/7(29)/2014-Works

Sealed Tenders in **Two parts [Part(A)-Technical Bid & Part(B)-Financial/Price Bid]** are invited on behalf of the Executive Director, NABI for the award of **Energy Audit and Validation work of NABI Main campus at Knowledge city, sector-81, Mohali-Punjab, India.**

1	Issue of Tender documents	16-12-16
2	Last date and time for submission of sealed Tender	26-12-16 upto 3:00pm
3	Estimated Value of Work	Rs.1,43,750/-
4	Cost of Tender Document	Rs.500/-
5	Earnest Money Deposit(EMD)	Rs.2875/-
6	Time for completion of work	06 weeks
NOTE: Offers received by FAX/email will be summarily rejected.		

For more details/information, kindly visit the website: www.nabi.res.in or eprocure.gov.in

Assistant Engineer-Electrical

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

NOTICE INVITING TENDER

1. Sealed Tenders in two parts [Part(A)-Technical Bid & Part(B)-Financial/Price Bid] are invited on behalf of the Executive Director, NABI from the agencies/firms who have executed similar works with some Central Govt. department/State Govt. Department/Central Autonomous body/State Autonomous Body/Central PSU/State PSU/City Development Authority/Municipal Corporation of City/Private Companies & Organisations for carrying out the **Energy Audit and Validation work of NABI Main campus at Knowledge city, sector-81, Mohali-Punjab, India.**

1.1 The work is estimated to cost **Rs.1,43,750/- only**. This estimate, however, is given merely as a rough guide.

1.2 Technical Eligibility Criteria for Bidders-

1.2.1 The firm should be empanelled as Energy Service Company(ESCO) with Bureau of Energy Efficiency(BEE), Govt. of India.

1.2.2 The firm shall have accredited Energy Auditors approved by the Bureau of Energy Efficiency(BEE), Govt. of India who will be authorized by the firm to carry out this work.

1.2.3 Experience of having successfully completed works during last 07 years ending last day of the month previous to the one in which applications are invited.

The firm shall have completed atleast one similar work for the minimum connected load of 1200kW with some Central Govt. department/State Govt. Department/Central Autonomous body/State Autonomous Body/Central PSU/State PSU/City Development Authority/Municipal Corporation of City/Private Companies & Organisations.

Similar work means the work of Energy Audit, Water and Waste Audit in Institutional campus/Hospitals/Multistorey Office buildings/ Commercial complexes/Power Plants/Refineries/Manufacturing Plants & Industries/Research Centres and Laboratories

1.2.4 The Agency/firm must have valid Service Tax No. The certificate for the same shall be enclosed with the bid.

1.2.5 The Average Annual financial turnover of the firm should be at least 100% of the estimated cost during the last 03 consecutive financial years. Copies of duly attested statement (for last 03years) by Chartered Accountant should be provided.

Note- The Tenderer shall produce definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified above. Completion Certificates/proofs need to be enclosed. Also the Accreditation/empanelment certificates issued by BEE shall be enclosed with bid.

2. Agreement shall be drawn with the successful tenderer on prescribed format by the Competent Authority. Tenderer shall quote his rates as per various terms and conditions laid down in the tender document.

3. The time allowed for carrying out the work will be **06 weeks** from the date of start as defined in schedule 'C' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.

4. The Energy Audit and Validation work would be done after 01 year of the 70% occupancy of the newly built NABI Main campus. The occupancy is likely to be done by the end of January-2017 however, the occupancy confirmation (in writing) will be provided by NABI to the successful bidder for the commencement of allotted work.

5.(i) Tender documents will be issued from the office of Assistant Engineer-Electrical, NABI from 16-12-16 to 26-12-16 up to 12:00 pm, on payment of Rs.500/- as cost of tender OR can be downloaded directly from the website www.nabi.res.in or eprocure.gov.in (up to 26-12-16) and to be accompanied with a DD of Rs.500/- (Rupees Five hundred only) in favour of "National Agri-Food Biotechnology Institute" payable at Mohali as cost of tender documents.

(ii) Tender forms, NIT and all the Tender documents consisting of all the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen in the office of Assistant Engineer-Electrical, NABI on all working days between 10:00am to 5:00pm.

(iii) Tenders will be issued to eligible bidders provided they produce definite proof from the appropriate authority of having satisfactorily completed Technical eligibility criteria 1.2 as mentioned above.

6.(i) Tenders shall be accompanied with tender cost of Rs 500/- in the form of Demand Draft in favour of "National Agri-Food Biotechnology Institute" payable at Mohali.

(ii) Tenders shall be accompanied with Earnest money of Rs.2875/- in cash (up to Rs.10000/-)/Receipt Treasury Challan/Deposit at Call receipt of a scheduled bank/fixed deposit receipt of a scheduled bank/demand draft of a scheduled bank issued in favour of "National Agri-Food Biotechnology Institute" payable at Mohali.

(iii) **Submission of Tender-** The tender should be submitted in the envelopes as detailed below:

1. Envelope -1 marked as Technical Bid containing the following-

- a) Draft of Rs.500/- as cost of tender documents (if downloaded from website).
- b) Envelope containing EMD of Rs.2875/- in the prescribed format (i.e., DD/cash receipt, as the case may be)
- c) Documents related to Technical eligibility criteria 1.2 i.e., Completion certificates/proofs of the similar works completed, Empanelment/Accreditation certificates from BEE and all other required documents as mentioned in the Technical Eligibility criteria.
- d) Tender form-1
- e) Tender terms & conditions, clauses, schedules etc.

2. Envelope-2 marked as Financial/Price Bid containing the following-

- a) This shall contain the price for the execution of the works specified as per schedule-D.
3. Both the above envelopes shall be placed in a third envelope and Name of work, Date of opening of tender etc. shall be written on the cover which will be received by the Institute by 3:00 PM on 26-12-16 and will be opened on the same day at 3:30 PM.

7. The contractor whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule 'C'. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or

Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'C' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

8. The description of the work is as follows:

Energy Audit and Validation work of NABI Main campus at Knowledge city, sector-81, Mohali-Punjab, India.

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the type of system(so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed.

The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

9. The Competent Authority does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.

10. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

11. The Competent Authority reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

12. The tender for the works shall remain open for acceptance for a period of ninety(90) days from the date of opening of tenders/Ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelop system (strike out as the case may be) if any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Institute shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.

13. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting/Competent Authority shall within 15 days from the date of award of work, sign the contract agreement consisting of:-

a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued/downloaded at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.

b) Tender form-1

14. No price preference to any corporate society/Registered society, Govt. Public Sector undertakings / bodies shall be given and tenders shall be exclusively dealt with on merit.

15. The contractor shall comply with the provisions of the Apprentices Act 1961, minimum wages Act 1948, Workmen's compensation Act 1923, contract labour (Regulation and Abolition Act 1970), payment of wages Act 1938, Employer's liability Act 1938, Maternity Benefits Act 1961, Employee's State Insurance Act, 1948, Employees Provident Fund Act, 1952 and the Industrial disputes Act 1947 as applicable and the rules and regulations issued there under and by the local Administration/ Authorities from time to time as well all provisions of law applicable to workmen. Failure to do so shall amount to breach of the contract and the Engineer-in-Charge may at his discretion terminate the contract. The Contractor shall also be liable for any pecuniary liability arising on account of violation by him of any of the said Acts and shall indemnify the Institute on that account. Institute will not be liable for any act or omission on the part of the contractor in so far as any violation of any of the aforementioned acts.

16. Each tenderer shall submit only one tender; either by him or as partners in a joint venture. A tenderer who submits or participates in more than one tender will be disqualified.

17. Unless otherwise stated, the contract shall be for the whole work as described in the "Schedule of Scope of Work" and the drawings. The contractor shall be bound to complete the whole work as described in the schedule of items of works and the drawings, including additional items, if any, as per drawings and instructions. The issuance of certificate of completion as issued by the Engineer-in-Charge shall be mandatory and will be conclusive proof of completion of work.

18. Interpretations, corrections and changes to the Tenders Documents shall be made by Addendum, if required.

19. Each Tenderer shall ascertain prior to submitting his Tender that he has received all Addenda issued and he shall so acknowledge their receipt in his Tender.

20. The provisions in the Tender documents shall govern over the contents of the above paragraphs if in contradiction or variation.

21. All pages of the Tender should be page numbered and indexed.

22. It is the responsibility of tenderer to go through the tender document to ensure furnishing all required documents in addition to above, if any.

23. The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender.

24. A tender, which does not fulfill any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.

25. Tender sent by fax/telex/electronically shall be ignored.

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

Tender & Contract for Works

(A) Tender for the work of:- **Energy Audit and Validation work of NABI Main campus at Knowledge city, sector-81, Mohali-Punjab, India**

(i) To be submitted by 15:00 hours on 26-12-16 to the Executive Director, NABI

(ii) To be opened in presence of tenderers who may be present at 15:30 hours on 26-12-16 in the office of the Executive Director, NABI

Issued to*: _____

Signature of officer issuing the documents*: _____

Designation*: _____

Date of Issue*: _____

*Not to be filled if tender is downloaded from website.

TENDER

I/We have read and examined the notice inviting tender, schedule A, B, C, D Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Institute within the time specified in Schedule 'C' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in General Rules and Directions and in Clauses of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of its opening/ ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelop system (strike out as the case may be) and not to make any modification in its terms and conditions.

A sum of Rs.2875/- is hereby forwarded in cash/receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the Executive Director, NABI or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that the Executive Director, NABI or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in the Institute in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

GENERAL RULES & DIRECTIONS

1. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
2. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.
3. The Bidder/Contractor Firm should possess all the necessary clearance from all the Govt. authorities/departments for the related work as well as the regulatory affairs.
4. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
5. Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.
6. The Contractor whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule 'C'. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form.
7. Sales-tax/VAT, service tax, purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and Institute will not entertain any claim whatsoever in respect of the same. The bidder shall give the total composite price inclusive of all Central & State's levies and taxes i.e. Excise Duty, Service Tax, Sales Tax, Purchase Tax, Turnover Tax, Works Contract Tax etc.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Government of India and does not any time become payable by the contractor to the State Government, Local authorities in respect of any material used by the contractor in the works, then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.
8. The tender for the work shall not be witnessed by a contractor or contractors who himself/ themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
9. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.

CONDITIONS OF CONTRACT

Definitions

1. The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between competent authority on behalf of the Executive Director, NABI and the contractor, together with the document referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by Engineer-in-charge and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.
2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-
 - a) The expression **works** or **work** shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
 - b) The **site** shall mean the land/ or other places like building etc. on into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
 - c) The **contractor** shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such, individual, firm or company.
 - d) **Institute** shall mean the National Agri-Food Biotechnology Institute(NABI), Mohali.
 - e) **Administration** shall mean the administration of NABI, Mohali.
 - f) **Local authority** shall mean the municipal corporation of Mohali and shall also deemed to include any other body or department of the administration.
 - g) **Accepting Authority** shall mean the authority mentioned in Schedule 'C'.
 - h) **Engineer-Incharge** shall mean the Assistant Engineer-Electrical and Assistant Engineer-Civil of NABI.
 - i) **Schedule(s)** referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers.
 - j) **Department** means National Agri-Food Biotechnology Institute, Govt.of India.
 - k) **District Specifications** means the specifications followed by the State Government in the area where the work is to be executed.
 - l) **Tendered value** means the value of the entire work as stipulated in the letter of award.

- m) **Date of commencement of work:** The date of commencement of work shall be the date of start as specified in schedule 'C' or the first date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicated in the tender document.

Works to be carried out

3. The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Scope of Work (Schedule A) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.

Sufficiency of Tender

4. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

Discrepancies and Adjustment of Errors

5. The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
- 5.1 In the case of discrepancy between the schedule of work, the Specifications and/or the Drawings, the following order of preference shall be observed:-
- a) Description of Schedule of Scope of Work.
 - b) Particular Specification and Special Condition, if any.
 - c) Drawings.
 - d) CPWD Specifications with upto date amendments.
 - e) Indian Standard Specifications of B.I.S.
- 5.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
- 5.3 Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
- 5.4 In case of any conflict/discrepancy on any specification or item to be executed or any other issue related to the contract, the CPWD guidelines shall be referred to for the same with further recommendations and approvals of the Competent Authority.
6. No payment for the work done will be made unless contract is signed by the contractor.

CLAUSES OF CONTRACT

CLAUSE 1

(i) The contractor shall submit an irrevocable Performance Guarantee of **5% (Five percent)** of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified from the date of issue of letter of acceptance. This period can be further extended by the Competent Authority up to a maximum period as specified in schedule 'C' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand

Draft of any scheduled bank/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Government to make good the deficit.

(ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion of liability period of work plus 60 days beyond that. In case the time for completion of liability period gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.

(iii) The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the owner is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

(a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.

(b) Failure by the contractor to owner any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.

(iv) In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Competent Authority.

CLAUSE 2

Compensation for Delay

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'C' (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that specified in Clause 5 or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified.

- (i) **Compensation @ one percent (1%) per week of delay** for delay of work to be computed on per day basis provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.
- (ii) The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case, the contractor does not achieve a particular milestone mentioned in schedule C, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 3

When Contract can be Determined

Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- (ii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- (iii) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by

the Engineer-in-Charge.

(iv) If the contractor persistently neglects to carry out his obligations under the contract and/ or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.

(v) If the contractor shall offer or give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Government.

(vi) If the contractor shall enter into a contract with Government in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.

(vii) If the contractor had secured the contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.

(viii) If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.

(ix) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.

(x) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.

(xi) If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer - in-Charge.

When the contractor has made himself liable for action under any of the cases aforesaid, the Competent Authority shall have powers:

(a) To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government

(b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the

balance work.

In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 4

Contractor liable to pay Compensation even if action not taken under Clause 3

In any case in which any of the powers conferred upon the Competent Authority by Clause-3 thereof, shall have become exercisable and the same are not exercised, the non-exercise hereof shall not constitute a waiver of any of the conditions hereof and such powers shall Notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5

Time and Extension for Delay

The time allowed for execution of the Works as specified in the Schedule 'C' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in schedule 'C' or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the performance guarantee absolutely.

5.1 Programme Chart

The Contractor shall prepare an integrated program chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfilment of the program within the stipulated period or earlier and submit the same for approval of the Engineer-in-Charge within **07 days** of the issue of

letter of acceptance/award for the contract. The work has to be completed in stages as indicated in the Milestones and the program should be prepared in such a manner to achieve these Milestones as indicated therein or earlier.

The program chart should include the following: -

- a) Descriptive note explaining sequence of various activities.
- b) Network (PERT / CPM / BAR CHART) which will indicate resources in terms of manpower and specialized equipment for every important stage.
- c) Program for Measurement and Verification.
- d) Program for preparation and Submission of Energy Audit and Validation Report.

If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time. The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

5.2

If the work(s) be delayed by:-

- (i) Force majeure, or
- (ii) Abnormally bad weather, rains or
- (iii) Serious loss or damage by fire, or
- (iv) Civil commotion, local commotion of workmen, strike or lockout, affecting any of the Trades employed on the work, or
- (v) Delay on the part of other contractors or tradesmen engaged by owner in executing work not forming part of the Contract, or
- (vi) Non-availability of stores material, which are the responsibility of owner to supply or
- (vii) Non-availability or break down of tools and Plant to be supplied or supplied by Government, or
- (viii) Any other cause which, is beyond the Contractor's control. Then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the authority as indicated in Schedule 'C' but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

5.3 Request for rescheduling of Mile stones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form to the authority as indicated in Schedule 'C'. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 In any such case the authority as indicated in Schedule 'C' may give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'C' in writing, within 4 weeks of the date of receipt of such request respectively. Non application by the contractor for extension of time/ rescheduling of the milestones shall not be a bar for giving a fair and reasonable extension/ rescheduling of the milestones by the authority as indicated in Schedule 'C' and this shall be binding on the contractor.

CLAUSE 9

Payment of First & Final Bill

The contractor shall submit the First and Final bill within 10days of Physical completion of work. The payment for this work shall be made within 01month after the receipt of First and Final bill from the contractor. Contractor shall duly co-operate with Department/Institute in verifying the work done at site vis-à-vis scope of work as per the contract agreement.

No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer- in-Charge, will, as far as possible be made within the period specified herein under, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge, complete with account of materials issued by the Department and dismantled materials.

- (i) If the Tendered value of work is up to Rs. 45 lac: 2 months
- (ii) If the Tendered value of work is more than Rs.45 lac and up to Rs. 2.5 Crore: 3 months
- (iii) If the Tendered value of work exceeds Rs. 2.5 Crore: 6 months

CLAUSE 12 :

Deviations/ Variations Extent and Pricing

The Engineer-in-Charge after approval from Competent Authority shall have power

- i) Execute any extra item which was not initially considered in tender or could not be envisaged during estimation. The contractor shall be paid for same item based on DSR rates or market rate in case item is not available in DSR. In case of market rate, contractor has to submit analysis of rate in CPWD DAR format along with quotation/back up documents.
- ii) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and
- (iii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered be extended, if requested by the contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus
- (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 A. For Project and original works:

Deviation, Extra Items and Pricing

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the engineer-in-charge shall within prescribed time limit of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration:

In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plus cost index (at the time of tender) plus/minus percentage above/ below quoted contract amount. Payment of Extra items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Substituted Items, Pricing

A. For Project and original works:

In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para.

(a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/alteration: NOT APPLICABLE

Deviation, Deviated Quantities, Pricing

A. For Project and original works:

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within prescribed time limit of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/alteration:

In the case of contract items, which exceed the limits laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.

The prescribed time limits for finalising rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items are as under:

(i) If the Tendered value of work is up to Rs. 45 lac : 30 days.

(ii) If the Tendered value of work is more than Rs 45 lac and up to Rs. 2.5 Crore : 45 days.

(iii) If the Tendered value of work exceeds Rs. 2.5 Crore : 60 days.

12.3 A. For Project and original works:

The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

B. For Maintenance works including works of upgradation, aesthetic, special repair, addition/alteration: **NOT APPLICABLE**

12.4 The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Competent Authority may authorise consideration of such claims on merits.

12.5 For the purpose of operation of Schedule “F”, the following works shall be treated as works relating to foundation unless & otherwise defined in the contract:

(i) For Buildings : All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.

(ii) For abutments, piers and well staining : All works up to 1.2 m above the bed level.

(iii) For retaining walls, wing walls, compound walls, chimneys, over head reservoirs/tanks and other elevated structures : All works up to 1.2 metres above the ground level.

(iv) For reservoirs/tanks (other than overhead reservoirs/tanks) : All works up to 1.2 metres above the ground level.

(v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.

(vi) For Roads, all items of excavation and filling including treatment of sub base.

12.6

Any operation incidental for testing to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13

Foreclosure of contract due to Abandonment or Reduction in Scope of Work

If at any time after acceptance of the tender Competent Authority shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit

or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works. The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure;

(i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.

(ii) Owner shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however owner shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by owner, cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.

(iii) If any materials supplied by owner are rendered surplus, the same except normal wastage shall be returned by the contractor to owner at rates not exceeding those at which these were originally issued, less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor.

In addition, cost of transporting such materials from site to owner stores, if so required by owner, shall be paid.

(iv) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.

(v) Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

The contractor shall, if required by the Engineer-in-Charge, furnish to him, books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the owner as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the owner from the contractor under the terms of the contract.

A compensation for such eventuality, on account of damages etc. shall be payable @ 0.5% of cost of work remaining incomplete on date of closure i.e. total stipulated cost of the work less the cost of work actually executed under the contract shall be payable.

Clause 14

Carrying out part work at risk & cost of contractor

If contractor:

(i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-Charge; or

(ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge. The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:

(a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or

(b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

The Engineer- in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by Government because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

Any excess expenditure incurred or to be incurred by Government in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Government as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Government in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

CLAUSE 15

Suspension of Work

(i) The contractor shall, on receipt of the order in writing of the Competent Authority, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:

(a) on account of any default on the part of the contractor or;

(b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or

(c) for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer in-Charge.

(ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:

(a) the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;

(b) If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days.

(iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in subpara

(i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer in-Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by owner or where it affects whole of the works, as an abandonment of the works by owner, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by owner, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

CLAUSE 16

Action in case Work not done as per Schedule of Scope of Work

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-In-charge, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself. If it shall appear to the Engineer-in-charge, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in schedule 'C' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Competent Authority to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17

Contractor Liable for Damages, defects during liability period

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor

shall not be refunded before the expiry of twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Engineer-in-Charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

The liability period of work done by the contractor is till the date of award of Final GRIHA rating of Project by ADaRSH from the actual date of completion of work as certified by Engineer-Incharge. Any clarifications/documents asked by ADaRSH team regarding Energy Audit and Validation work during the process of award of GRIHA rating will have to be submitted by the contractor within the stipulated time lines.

CLAUSE 18

Contractor to Supply Tools, Tackles, Measuring Instruments & Plants etc.

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & plants as specified in schedule C. In addition to this, appliances, Instruments, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 19

Labour Laws to be complied by the Contractor

The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work, if required as per labour law. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996. Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

CLAUSE 19A

No labour below the age of fourteen years shall be employed on the work.

CLAUSE 19 B

Payment of wages:

(i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the C.P.W.D Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.

(ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

(iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Central Public Works Department contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorized made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.

(iv) (a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.

(b) Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.

(v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.

(vi) The contractor shall indemnify NABI against payments to be made under and for the observance of the laws aforesaid and any other law, Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors.

(vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

(viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.

(ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition, the Engineer -in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 20

Minimum Wages Act to be complied with

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.

CLAUSE 21

Work not to be sublet. Action in case of insolvency

The contract shall not be assigned or sublet without the written approval of the Engineer- in - Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer in- Charge on behalf of the President of India shall have power to adopt the course specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLAUSE 23

Changes in firm's Constitution to be intimated

Where the contractor is a partnership firm, the previous approval in writing of the Engineer in- Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the

same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 25

Settlement of Disputes & Arbitration

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- (i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the owner on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, the contractor may file for arbitration. The arbitrator shall be appointed by Competent Authority, NABI & arbitration shall take place at Mohali under arbitration act.
- ii) The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications 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.
- iii) It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

CLAUSE 26

Contractor to indemnify owner against Patent Rights

The contractor shall fully indemnify and keep indemnified the owner against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against owner in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the owner if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

CLAUSE 27

Lumpsum Provisions in Tender

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge

payable of measurement, the Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.

CLAUSE 28

Action where no Specifications are specified

In the case of any class of work for which there is no such specifications, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29

Withholding and lien in respect of sum due from contractor

(i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the owner shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer in- Charge or the owner shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the owner shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the owner or any contracting person through the Engineer-in- Charge pending finalization of adjudication of any such claim. It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or owner will be kept withheld or retained as such by the Engineer-in-Charge or owner till the claim arising out of or under the contract is determined by the arbitrator(if the contract

is governed by the arbitration clause) by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the owner shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

(ii) owner shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him 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 owner to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and 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 by owner to the contractor, without any interest thereon whatsoever.

CLAUSE 34

Hire of Plant, Instruments & Machinery

The contractor shall arrange at his own expense all tools, plant, Instruments, machinery and equipment (hereinafter referred to as T&P) required for execution of the work.

CLAUSE 36

Employment of Technical Staff and employees

Contractors Superintendence, Supervision, Technical Staff & Employees

The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

In case contractor fails to depute the technical representative at site rate of recovery shall be imposed as per provisions in CPWD manual 2014 as amended/revised by CPWD from time to time.

CLAUSE 39

Termination of Contract on death of contractor

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-Incharge on behalf of the Executive Director, NABI shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 40

If relative working in department then the contractor not allowed to tender

The contractor shall not be permitted to tender for works if officials responsible for award and execution of contracts. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in NABI. Any breach of this condition by the contractor would render him debarred from tendering .

NOTE: By the term "near relatives" is meant wife, husband, parents and grandparents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

CLAUSE 41

No Gazetted Engineer to work as Contractor within one year of retirement

No engineer of gazetted rank or other gazetted officer employed in NABI engineering division or administrative duties shall work as a contractor or employee of a contractor for a period of one year after his retirement from NABI service without the previous permission of Competent Authority at NABI in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Competent Authority at NABI as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 44

Apprentices Act provisions to be complied with

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the owner may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

Applicable Law

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

C.P.W.D. SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical.)

2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.

4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)

5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11½") for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ " for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.

6. All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

7. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge 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 contractor should take adequate steps to ensure proper use of equipment by those concerned:- The following safety equipment shall invariably be provided.

(i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.

(ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.

(iii) Those engaged in welding works shall be provided with welder's protective eye shields.

(iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

(v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated atleast for an hour before the workers are allowed to get into the 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. In addition, the contractor shall ensure that the following safety measures are adhered to :-

(a) Entry for workers into the line shall not be allowed except under supervision of higher officer.

(b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.

(c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.

(d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.

(e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

(f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.

(g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.

(h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.

(i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.

(j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.

(k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.

(l) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.

(m) The workers shall be provided with Gumboots or non sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.

(n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.

(o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.

(p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

(vi) The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-

(a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.

(b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

(c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

8. An additional clause (viii)(i) of Central Public Works Department Safety Code (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :

(i) White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.

- (ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
- (iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
- (iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
- (v) Overall shall be worn by working painters during the whole of working period.
- (vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
- (vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical officer.
- (viii) Medical examination may be done further in such cases.
- (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

9. When the work is done near any place where there is risk of drowning, 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 obtained during the course of the work.

10. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:-

- (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
- (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- (c) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
- (d) In case of every hoisting machine and of every chain ring hook, shackle swivel 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. In case of a hoisting machine having a variable safe working load each safe working load and the condition 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.
- (e) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer in- Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.

10. 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 reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the 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 worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

11. 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 at or near places of work.

12. 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.

13. 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 or Engineer-in-Charge of the department or their representatives.

14. Contractor shall indemnify NABI from the disputes arising out of loss of life to its workers, material during the whole duration of contract agreement including defect liability period.

15. Notwithstanding the above clauses from (1) to (16), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

Note: - The above safety precautions/provisions along with any other as may be required to execute the work shall be provided by contractor free of cost.

Schedule-A

SCHEDULE/SCOPE OF WORK

ABOUT THE WORK/PROJECT:

National Agri-Food Biotechnology Institute is a Central Autonomous Institute under Department of Biotechnology, Ministry of Science and Technology, Govt. of India. The Institute has developed its new campus in 35 acres in Knowledge City, sec-81, Mohali. This Project is registered for GRIHA Rating/ certification (i.e., Green rating for Integrated Habitat Management) with ADaRSH (Association for Development and Research of Sustainable Habitats). To comply for GRIHA criteria No.32, the Energy Audit and Validation of the Project need to be done as per the GRIHA requirements. The details of the different buildings constructed at NABI with their built up areas are given as below:

S. No	Name of Building	Built up Area (sq.m)
1.	Laboratory, Entrance Atrium	15431.00
2.	Guest House	1005.35
3.	Research Scholars	4045.56
4.	Animal House	370.79
5.	Utility-1	1629.25
6	Utility-2	728.35
7	Apartments-V-IV, Apartments-IV-III Director's Residence	6242.50
8	Main Entrance Gate	13.00
9	Metering Room and HT Panel Room	40.00
10	TOTAL	29505.8 say 29506sq.m

Also the contract demand/Electrical load applied to the Electricity Department i.e., PSPCL for NABI is 1334kW.

Standard Scope of Work:

The firm will be required to validate the performance of the energy and environmental systems in the project as predicted during the design and development stages of the project. The firm will also be required to carry out Energy audit of the project as per the requirements of GRIHA Criterion 32: Energy Audit & Validation. The energy audit & validation would be done after occupying the building(s) in the project. The building(s) must be occupied for minimum 70% area, for a minimum duration of 01 year and maximum duration of 02 years. After occupancy, the firm will be required to carry out following audits:

1. Energy Audit
 - a. Energy consumption
 - b. Thermal comfort
 - c. Visual comfort
2. Water and Waste Audit
 - a. Water quality
 - b. Solid waste generation
 - c. Solid waste disposal process
3. Sound Audit

Conduct sound level audit as specified in Criterion 29 of GRIHA Version 3, to measure the following:

 - a. Indoor noise levels
 - b. Outdoor noise

These audits should be conducted for typical representative days. The firm will be required to submit audit reports in the specified format (as below) for validation of the information provided at the time of award of provisional rating. The energy audit report shall include audit data of 01 year as per the specified format. The sound audit report in the format specified below shall contain measured average ambient noise level at site and indoor noise levels at different locations inside the building.

Formats for Energy Audit Report:

- 1) For Energy Audit- Annexure 1
- 2) For Water and Waste Audit- Annexure 2
- 3) For Sound Audit- Annexure 3

Apart from above, the following documents shall be submitted by the firm:

- 1) Completed and Signed Audit Forms demonstrating that all Energy and Environment systems of the building/Project are performing as predicted and match the information provided at the time of award of provisional GRIHA rating.
- 2) Certificate stating that the Energy Audit has been conducted by an Energy Auditor approved/accredited by the Bureau of Energy Efficiency(BEE), Govt. of India.

The firm shall also require to coordinate with the existing architect of the NABI Project i.e., M/s HCPDPM Pvt. Ltd., Ahmedabad to submit the Audit data/reports as per the GRIHA requirements.

Anything or any item/documentation not specifically mentioned in this tender but if required for the compliance of GRIHA criteria no.32 shall be considered part of the scope of work and nothing shall be paid extra on account of that.

ANNEXURE-1

Table 32.1 Energy audit format

A. Energy consumption

No.	Item		Value
1	Name of the building		
2	Type of building (office, institution, hotel, hospital, and so on)		
3	Working hours (day working/24 hour working)		
4	Working days/week (5/6/7 days per week)		
5	Area of the building (exclude parking, lawn, roads, and so on)	1. Built Up Area (m ²)(Excluding Basement Area)	
		2. Conditioned Area(in m ²)	
		3. Conditioned Area(as % of built up area)	
6	Connected Load (kW) or Contract Demand (kVA)		
7	Installed capacity of DG/ GG Sets (kVA or kW)	No. Capacity	
8	Installed capacity of transformers (kVA)	No. Capacity	
9	Installed capacity of air conditioning system (TR)		
10	Installed lighting load (kW)		
11	a. Annual electricity consumption, purchased from utilities (kWh)		
	b) Annual electricity consumption, through diesel generating (DG)/ gas generating (GG) set(s) (kWh) (Data collected from metre installed on DG/GG sets)		
	c) Total annual electricity consumption, utilities + DG/GG sets (kWh)		
12	a) Energy consumption for lighting (kWh) (Data collected from indoor lighting sub metre)		
	b) Energy consumption for HVAC (kWh)	• HVAC plant (Data collected from HVAC plant sub meter)	
		• AHU fans (Data collected from AHU fans sub meter)	
13	a) Annual cost of electricity, purchased from utilities (Rs) (Provide monthly electricity bills)		
	b) Annual cost of electricity generated through DG/GG Sets (Rs)		
	c) Total annual electricity cost, utilities + DG/GG Sets (Rs)		
14	HSD (or any other fuel oil used, specify)/gas consumption in DG/GG sets (litres/cu metres) in the year		
15	Fuel (FO, LDO, LPG, NG) used for generating steam/water heating in the year (in appropriate units)		
16	EPI (Energy Performance Index) in kWh/ m ² /year Energy includes electricity purchased and generated (excluding electricity generated from on-site renewable resources)		

B. Thermal comfort data

1	Provide hourly temperature and relative humidity profile of the building areas for at least one day. Readings should be taken for at least 20% of all representative spaces of the building.
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C. Visual comfort audit

Average illumination level in all building areas measured at horizontal work plane

No.	Area (For example: Office area-enclosed, Office area-open plan, Corridor, Restroom, and so on.)	Average lighting level (lux)
I hereby declare that the building is fully occupied since..... and all the above furnished information is true in all respect		
Signature of the building owner		or authorized representative

ANNEXURE-2

Table 32.2 Water and waste audit format

A. Water audit

1	What are the different sources of water supply to the building? Tick on the applicable options <input type="checkbox"/> Municipal supply <input type="checkbox"/> Ground water <input type="checkbox"/> Tanker		
2	Is there a raw water treatment plant on site?	Yes ()	No ()
3	Is there a wastewater treatment plant on site?	Yes ()	No ()
4	Provide water quality test reports for potable and treated water specifying the following parameters		
	Parameter	Drinking water	Treated/ recycled water
	Total hardness (as CaCO ₃) (mg/litre)		
	Total dissolved solids (mg/litre)		
	Chlorides as chlorine (mg/litre)		
	Colour (hazen)		
	Turbidity (NTU)		
	Alkalinity (mg/l)		
	Calcium (as Ca), mg/litre		
	Boron (mg/litre)		
	Sulphates (as SO ₄) (mg/litre)		
	Nitrates (as NO ₃) (mg/litre)		
	Conductivity at 25 °C (us/cm)		
	pH		
	Anionic detergents as MBAS (mg/litre)		
	Arsenic (mg/litre)		
	Iron (mg/litre)		
	Fluorides (mg/litre)		
	Lead (mg/litre)		
	Copper (mg/litre)		
	Zinc (mg/litre)		
	Phenolic compounds (as C ₆ H ₅ OH) (mg/litre)		
	Cyanide (mg/litre)		
	Chromium (mg/litre)		
(In case regular water quality test have been conducted for the building, these test reports can be submitted. However, it should be ensured that all the parameters specified above have been included in these test reports.)			

B. Solid waste audit					
1	Total quantity of waste generated (kg/day)				
2	Are multi-coloured bins provided for waste segregation at source?		Yes ()	No ()	
3	Is there a provision of space for hygienic storage of segregated waste?		Yes ()	No ()	
4	If answered 'yes' for '3', please provide details for the storage space for the following type of waste:			Area/volume (sq. m. / litres)	
	1. Biodegradable				
	2. Recyclable				
	3. Inert and miscellaneous				
	4. Hazardous				
5	Quantity of waste generated (Kg) <i>This data should be collected for at least 2 representative days in a week.</i>				
	Day	Type of waste (Kg)			
	1	Biodegradable	Recyclable	Inert and miscellaneous	Hazardous
	2				
	3				
5	Is there a treatment plant for biodegradable waste?		Yes ()	No ()	
6	If answered 'yes' for '5' then provide the following details				
	1. Type of plant				
	2. Capacity				
9	Provide a narrative (maximum 250 words) on how each type of waste generated by the building is being weighed and disposed. Also specify procedure adopted for e-waste disposal.				
<p>I hereby declare that the building is fully occupied for the last one year and all the above furnished information is true in all respect</p> <p>Signature of the building owner</p> <p style="text-align: right;">or authorized representative</p>					

ANNEXURE-3

Table 29.3: Sound audit format

Outdoor noise levels			
Façade	Measured sound level dB (A)	Recommended sound level as set in CPCB-Environmental Standards- Noise (ambient standards) dB (A)	

Note: Sound level should be measured outside each façade of the building.

Indoor noise levels			
Room	Location	Measured sound level dB (A)	Recommended sound level as set in CPCB-Environmental Standards- Noise (ambient standards) dB (A)

Note: In case of more than one building on site conduct outdoor and indoor sound level audit for all buildings separately.

SCHEDULE-B

Reference to Conditions of Contract

Name of Work: Energy Audit and Validation work of NABI Main campus at Knowledge city, sector-81, Mohali-Punjab, India

Estimated cost of work : Rs.1,43,750/-

- (i) Earnest Money : Rs.2875/-
- (ii) Performance Guarantee : 5% of tendered value

SCHEDULE –C

GENERAL RULES & DIRECTIONS

Officer inviting Tender: **Assistant Engineer-Electrical**

Maximum percentage for quantity of items of work
to be executed beyond which rates are to be
determined in accordance with Clauses 12.2 & 12.3.

See below

Definitions:

1. Engineer-in-Charge	Assistant Engineer –Electrical/Civil
2. Accepting Authority	Executive Director, NABI
3.Department	NABI, Mohali

Clause 1

(i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance/award**07 days**

(ii) Maximum allowable extension with late fee @ 0.1% per
day of Performance Guarantee amount beyond the period
provided in (i) above**05 days***

Clause 2

Authority for fixing compensation under clause 2.**Executive Director, NABI**

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start of
work –

**07 days after the written confirmation from NABI regarding the occupancy of buildings
for conducting Energy Audit and Validation Work**

Time allowed for execution of work. **06weeks after reckoning date of start of
work**

Authority to decide:

(i) Extension of time
..... **Executive Director, NABI**

(ii) Rescheduling of mile stones
..... **Executive Director, NABI**

(iii) Shifting of date of start in case of delay in handing over of site.....**Executive Director,
NABI .**

Clause 12

Type of work * **Energy Audit and Validation**

12.2 & 12.3 Deviation Limit beyond which clauses

12.2 & 12.3 shall apply for building work**as per CPWD Works Manual 2014 with upto date amendments**

12.5 (i) Deviation Limit beyond which clauses

12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items)

..... **as per CPWD Works Manual 2014 with upto date amendments**

(ii) Deviation Limit for items mentioned in earth

work subhead of DSR and related items **as per CPWD Works Manual 2014 with upto date amendments**

Clause 16

Competent Authority for deciding reduced rates.

.....

Executive Director, NABI

Clause 18

List of mandatory machinery, Instruments tools & plants to be deployed by the contractor at site for execution of respective work at required time period/intervals:-

- a) Three phase Power Analyzer
- b) Instant Power Meter
- c) Lux meter
- d) Flow meter
- e) Hygrometer
- f) Thermography Imager
- g) Infra red Gun

The above is just an exhaustive list. Any other machinery, Instruments, tools & plant required during execution of allotted work shall be provided by contractor. No extra payment shall be paid to contractor for any machinery, Instruments, tool & plants etc.

Clause 36 (i)

Requirement of Technical Representative(s) and recovery Rate----- **As per requirements laid down in tender and as per CPWD Works MANUAL 2014 Or as amended from time to time by CPWD**

SCHEDULE- D

FINANCIAL/PRICE BID

We hereby quote the following price for taking up the tendered work:

S.No	Item description	Amount (in Rs.)(in figures)	Amount (in Words)
1	Fees for conducting Energy Audit, Water and Waste Audit, Sound Level Audit and Validation of NABI Main campus as per the GRIHA criterias and SCHEDULE A of this tender document		

NOTE:

- 1) *The rates shall be quoted by the contractor in the above format.*
- 2) *The rates quoted shall be inclusive of all taxes and duties etc. as applicable to this contract.*

(Signature and Stamp of bidder)

FORM OF PERFORMANCE
SECURITY (BANK GUARANTEE)

In consideration of the Executive Director, NABI (hereinafter called "The Institute") having offered to accept the terms and conditions of the proposed agreement between.....and.....(hereinafter called "the said Contractor(s)") for the work..... (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a security/guarantee from the Contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the Institute an amount not exceeding Rs. (Rupees..... Only) on demand by the Institute.
2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Institute stating that the amount claimed as required to meet the recoveries due or likely to be due from the said Contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupeesonly)
3. We, the said bank further undertake to pay the Institute any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Institute under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Institute certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

We, (indicate the name of the Bank) further agree with the Institute that the Institute shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Institute or any indulgence by the Institute to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Institute in writing.
8. This guarantee shall be valid up to satisfactory completion of work at site and as per successful completion of time schedule period given in tender document.....unless extended on demand by the Institute. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.
..... (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor.....(indicate the name of the Bank)