

**INSTITUTE WORKS DEPARTMENT,IISER MOHALI**  
**NOTICE INVITING TENDER**  
**IISER/EE-EO/TENDER-P/12/3**

1. Indian Institute of Science Education and Research (IISER) Mohali, invites item rate tenders for the work of “ Construction of equalization tank Area at IISER Mohali”
2. Estimated Cost Rs. 11,86,300/-
3. Cost of tender documents Rs. 563/-

4.Earnest Money Deposit (EMD) = Rs.24,000/-

5.Notice Inviting Tender (NIT), General and special terms and conditions Bill of Quantities (BOQ) attached herewith constitute the Tender Document. Interested Agencies/Contractors may download the tender document . Those downloading the tender document from IISER's Website must enclose Demand Draft for Rs.563/- in favour of Registrar, Indian Institute of Science Education and Research Mohali payable at Chandigarh separately alongwith their bid towards Tender Cost.

6.Sealed tenders shall be received up to 1500 hrs (3.00 PM) on 07.02.12 in the office of Executive Engineer, IISER Mohali, Chandigarh and technical bids shall be opened at 15.30 hrs (3.30 PM) on the same day i.e. on 07.02.12 in the presence of bidders who wish to be present.

**Executive Engineer**  
**Head IWD, IISER Mohali**  
**IISER Mohali, Sector-81, Knowledge City, SAS Nagar-140306**  
**Tel. No. : 0172-2240110**  
**Fax: No. 0172-2240266**  
**Website : [www.iisermohali.ac.in](http://www.iisermohali.ac.in)**

**Notice Board**

**NOTICE INVITING TENDER**

1. Sealed item rate/percentage rate tenders are invited on behalf of the Director IISER Mohali from approved and eligible contractors of C.P.W.D. and those of appropriate list of Department Posts and Telecommunications, U.T. Administration, Chandigarh Housing Board, State PWD's for the work of "Construction of equalization tank at IISER Mohali".

The enlistment of the contractors should be valid on the last date of sale of tenders.

In case only the last date of sale of tender is extended, the enlistment of contractor should be valid on the original date of sale of tenders.

In case both the last date of receipt of application and sale of tenders are extended, the enlistment of contractor should be valid on either of the two dates i.e. original date of sale of tender or on the extended date of sale of tenders.

1.1 The work is estimated to cost Rs. 11,86,300/-. This estimate, however, is given merely as a rough guide

1.1.1. The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the tenders. He will also nominate Division which will deal with all matters relating to the invitation of tenders.

For composite tender, besides indicating the combined estimated cost put to tender, should clearly indicates the estimated cost of each component separately. The eligibility of tenderer will correspond to the combined estimated cost of different components put to tender

## 1.2 CRITERIA OF ELIGIBILITY FOR ISSUE OF TENDER DOCUMENTS

1.2.1 Bidder who download the tender documents from web site are required to submit separately Demand Draft of Rs 563/- favoring Registrar, IISER Mohali and payable at Chandigarh.

1.2.2

The tender shall be received by the undersigned by 1500 hrs on 07.02.2012 and envelope No. 1 only containing earnest money, conditions and tender documents shall be opened on the same day at 1530 hrs in the presence of tenderer or their authorized representative who may like to be present. No consideration will be given to a tender received after the above stipulated time and date. Eligibility related documents shall be evaluated for criteria stipulated at 1.2.3 and agencies/contractors will accordingly be qualified/disqualified by the competent Authority. The financial bid (Envelope No 2) of qualified tenderer shall then be opened at notified time, date and place in presence of tenderer or their representative. The rates of each items must be quoted in figures and words.

1.2.3 Contractors who fulfill the following criteria shall be considered by IISER Mohali for technical evaluation ( if required) and opening of commercial bids:

- I) Contractors /firms should have successfully completed during last 7 years ending last day of the month previous to the one in which the bidding are invited, either three similar works costing not less than 40% i.e. Rs.4.75 lacs or two similar works costing not less than 50% i.e. Rs.5.94 lacs and one similar work costing not less than 80% i.e. Rs.9.50 lacs of the estimated cost of the work out of which at least one should have been executed in Govt departments.
- II) Average annual financial turn over during the last 3 (three) years ending 31st March of the previous year should at least be 30% of the estimated cost of work.
  - I11) Not incurred loss in more than two years during the last five years ending 31st March of the previous year.

1.2.4 **To become eligible for issue of tender, the tenderer shall have to furnish an affidavit as under :-**

I/We undertake and confirm that eligible similar works(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.

For the purpose of clause 'Similar work' means the work of Construction of RRC structure.

2. Agreement shall be drawn with the successful tenderer on General Conditions of Contract for works which is available from the Engineer-in-Charge. Tenderer shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.

3. The time allowed for carrying out the work will be 75 Days from the date of start as defined in schedule 'F' 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 site for the work is available

OR

The site for the work shall be made available in parts as specified below:-

---

5. a) The last date of issue of applications shall be: To be downloaded from website

b) Tender document consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be downloaded from website .

6. i) Tenders shall be accompanied with tender cost of Rs 563/- in form of Demand Draft in favour of Registrar, IISER Mohali.

ii) Tenders shall be accompanied with Earnest money of Rs.24,000/- by way of 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 the Registrar, IISER Mohali, Payable at Chandigarh. 50% of earnest money or Rs. 20 lakh, whichever is less, will have to be deposited in the shape prescribed above and balance amount of earnest money can be accepted in the form of Bank guarantee issued by a scheduled bank having validity for 6 months or more from the last date of receipt of tenders

iii) The tender shall be received by the undersigned by 1500 hrs on .....2012 and envelope No. 1 only containing tender cost, earnest money, conditions and tender documents shall be opened on the same day at 1530 hrs in the presence of tenderer or their authorized representative who may like to be present. No consideration will be given to a tender received after the above stipulated time and date . Eligibility related documents shall be evaluated for criteria stipulated at 1.2.4 and agencies/contractors will accordingly be qualified/disqualified by the competent Authority. The financial bid (Envelope No 2) of qualified tenderer shall then be opened at notified time, date and place in presence of tenderer or their representative. The rates of each items must be quoted in figures and words.

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 F. 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 'F'. 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:

**Construction of equalization tank at IISER Mohali.**

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (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, water, electricity access, 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 of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Institute 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 tenders 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 contractor shall not be permitted to tender for works in the Institute's Engineering Department (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Executive Engineer and Junior Engineer (both inclusive). 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 relative to any Group A & B officer in the Institute's Engineering Department. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Institute/debarring for further tendering in the Institute for at least 5 years.
13. No Engineer or other officers employed in Engineering or Administrative duties in Engineering Department of the Institute is allowed to work as a contractor for a period of one year after his retirement from Institute's service without the previous permission of the competent authority in writing. This contract is liable to be canceled 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 the competent authority as aforesaid before submission of the tender or engagement in the contractor's service.

14. The tender for the works shall remain open for acceptance for a period of One hundred twenty (120) days from the date of opening of tenders/ One hundred twenty 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 re-tendering process of the work.
15. This Notice inviting tender shall form a part of the contract document. The successful tenderer/ contractor, on an acceptance of his tender by the Accepting Authority, shall within 15 days from the stipulated date of start of the work sign the contract consisting of:
  - a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
  - b) Standard Form 7/8.
16. For Composite Tenders
  - 16.1.1 The Engineer Incharge of the major component will call tenders for the composite work. The cost of tender document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender.
  - 16.1.2 The tender document will include following three components:
    - Part A:- Form-6, Form-7/8 including schedule A to F for major component of the work, Standard General Conditions of Contract or latest edition as applicable with all amendments/modifications.
    - Part B:- General/specific conditions, specifications and schedule of quantities applicable to major component of the work.
    - Part C: Schedule A to F for minor component of the work. (Engineer in charge of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule A to F for major components) General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.
  - 16.1.3 The tenderer must associate with himself, agencies of the appropriate class eligible to tender for each of the minor component individually.
  - 16.1.4 The eligible tenderers shall quote rates in terms of overall percentage above or below the total estimated amount put to tender must be filled both in figures and words on the last page of schedule of quantities. It will be obligatory on the part of the tenderer to sign the tender document for all the components (The schedule of quantities, conditions and special conditions etc.)

16.1.5 After acceptance of the tender by competent authority, the Engineer in charge of major component of the work shall issue letter of award on behalf of the Director. After the work is awarded, the main contractor will have to enter into one agreement with Engineer in charge of major component and has also to sign two or more copies of agreement depending upon number of Engineer Incharge of minor components. One such signed set of agreement shall be handed over to Engineer in charge of minor component. Engineer Incharge of major component will operate part A and part B of the agreement. Engineer in charge of minor component(s) shall operate Part C along with Part A of the agreement.

16.1.6 Entire work under the scope of composite tender including major and all minor components shall be executed under one agreement.

16.1.7 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works. The Earnest Money will become part of the security deposit of the major components of work.

16.1.8 The main contractor has to associate agency(s) for minor component(s) conforming to eligibility criteria as defined in the tender document and has to submit detail of such agency(s) to Engineer-in-charge of minor component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-charge of minor component(s).

16.1.9 In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-charge of minor component. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.

16.1.10 The main contractor has to enter into agreement with the contractor(s) associated by him for execution of minor component(s). Copy of such agreement shall be submitted to Hospital Engineer in charge of each minor component as well as to Engineer in charge of major component. In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.

16.1.11 Running payment for the major component shall be made by Engineer-in-Charge of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer-in-Charge of the discipline of minor component directly to the main contractor.

16.1.12 Final bill of whole work shall be finalized and paid by the Engineer-in-Charge of major component. Engineer(s) in charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the Engineer-in-Charge of major component for including in the final bill for composite contract.

16.1.13 It will be obligatory on the part of the tenderer to sign the tender document for all the components before the first payment is released.

17. 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.
18. 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, 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.
19. 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.
20. Unless otherwise stated, the contract shall be for the whole work as described in the "Schedule of items of Works" 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.
21. Interpretations, corrections and changes to the Tenders Documents shall be made by Addendum, if required.
22. 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.
23. Following documents shall accompany the tenders:
  - I) Demand draft/Deposit at call receipt from a Scheduled Bank towards earnest money.
  - ii) Partnership deed or Registration Certificate of the Firm or Company as the case may be.
  - iii) Power of Attorney
24. The provisions in the Tender documents shall govern over the contents of the above paragraphs if in contradiction or variation.
25. The contractor shall comply with the provisions of prevalent ESI Act.



**Tender Form 7/8****Percentage Rate Tender/Item Rate Tender & Contract For Works**

(A) Tender for the work of “Construction of equalization tank at IISER Mohali”

(i) To be submitted by 1500 hours on 07.02.12

(ii) To be opened in the presence of tenderers who may be present at 1530 hours on 07.02.12 in the office of the Executive Engineer.

Issued to : To be downloaded from website

Signature of officer issuing the documents

Designation Executive Engineer, IISER Mohali

Date of issue To be downloaded from website

**TENDER**

I/we have read and examined the notice inviting tender, schedule A,B,C,D,E & F specifications applicable, Drawings and Designs, General Rules and Directions, conditions of Contract, clauses of contract, special conditions, schedule of rate and 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 ‘F’ viz. schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of general rules and Directions and in Clause 11 of the conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

I/we agree to keep the tender open for 120 days from the due date of its opening / 120 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 modifications in its terms and conditions.

A sum of Rs 24,000/- 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 in favour of the Registrar, IISER payable at Chandigarh as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the said Director, IISER 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 President of India 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 or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid. I/We shall be debarred for participation in the re-tendering process of the work.

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 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 Institute.

Dated:-

Signature of Contractor

Postal Address:

Witness:

Address:

Telephone No.:

Fax No.:

Occupation:

E-Mail.:

### **ACCEPTANCE**

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Institute for a sum of Rs. \_\_\_\_\_

The letters referred to below shall form part of this contract agreement:

- i) \_\_\_\_\_
- ii) \_\_\_\_\_
- iii) \_\_\_\_\_

Dated \_\_\_\_\_

**General Rules & Directions**

1. All works proposed for execution of contract will be notified in a form of invitation to tender pasted in public places and signed by the officer inviting tender or by publication in News papers as the case may be.

This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tenderer, and the amount of the security deposit and performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills: Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be opened for inspection by the contractor at the office of officer inviting tender during office hours.

2. 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.

3. Receipts for payment on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.

**Application for item Rate Tender only (Form- 8)**

4. 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.

The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.

**Applicable for  
Percentage Rate  
Tender only  
(Form- 7)**

4 A. In case of Percentage Rate Tenders, tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule –A, he will be willing to execute the work. The tenders submitted shall be treated as invalid if:

(i) The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.

(ii) The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.

(iii) The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender:-

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.

4B. In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two or more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of Engineer-in-charge of major & minor component(s) (also Director, IISER in case

Horticulture work is also included in the tender).

In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor.

Contractor(s), whose earnest money is forfeited because of non- submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.

5. The officer inviting tender or his duly authorised assistant, will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in Rule-I. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.

6. 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.

7. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractors shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorised Cashier.

8. The memorandum of work tendered for and the schedule of materials to be supplied by the department and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.

9. The tenderer shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them. The unsuccessful tenderer shall return all the drawings given to them.

9A. Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.

**Applicable for  
Item Rate  
Tender only  
(Form- 8)**

10 In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rates tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In even no rate has been quoted for any item(s), leaving space both in figure(s), word(s) and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.

**Applicable for  
Percentage Rate  
Tender only  
(Form- 7)**

10A. In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy.

11. In the case of any tender where unit rate of any item/items appear unrealistic, such tenders will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.

**Applicable for  
Item Rate  
Tender only  
(Form- 8)**

12. All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' should invariably be upto two decimal places. While quoting the rate in Schedule of quantities, the word only should be written closely following the amount and it should not be written in the next line.

**Applicable for  
Percentage Rate  
Tender only  
(Form- 7)**

12A. In Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the words 'Rs' should be written before the figures of rupees and word P after the decimal figures, e.g. 'Rs. 2.15P' and in case of words, the word 'Rupees' should precede and the word 'Paise' should be written at the end.

13.(i) 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 F. This guarantee shall be in the form of 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.

(ii) The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the tendered value of the work. The Security deposit will be collected by deductions from the running bills of the contractor at the rates mentioned above and the earnest money deposited at the time of tenders, will be treated as a part of the Security Deposit. The Security amount will also be accepted in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or State Bank of India will also be accepted for this purpose provided confirmatory advice is enclosed.

14. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.

15. Sales-tax / VAT (Except Service Tax), purchase tax, turnover tax or any other tax on material in respect of this contract shall be payable by the Contractor and the Institute will not entertain any claim whatsoever in respect of the same. However, in respect of service tax, same shall be paid by the contractor to the concerned deptt. on demand and it will be reimbursed to him by the Engineer-in-charge after satisfying that it has been actually and genuinely paid by the contractor.

16. The contractor shall give a list of any group A,B,C&D employees in IISER related to him.

17. 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.

18. The tender for composite work includes in addition to building work all other works such as sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and path etc. The tenderer apart from being a registered contractor (B & R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture work in a composite tender subject to the approval of the institute.

19. The contractor shall submit list of works which are in hand (Progress) in the following form:-

Name of work	Name and particulars of divn. Where work is being executed	Value of work	Position of works in progress	Remarks
1	2	3	4	5

20. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Engineer Incharge may in his discretion without prejudice to any other right or remedy available in law 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.

**21. Procedure for submission of Tenders:**

The following procedure shall be adopted for submission and opening of tenders. The sealed envelopes shall be submitted as follows:



21.1.1 Bidder who download the tender documents from web site are required to submit separately Demand Draft of Rs 563/- favoring Registrar, IISER Mohali and payable at Chandigarh.

21.1.2 The tender shall be received by the undersigned by 1500 hrs on ..... ( 2012) and envelope No. 1 only containing earnest money, conditions and tender documents shall be opened on the same day at 1530 hrs in the presence of tenderer or their authorized representative who may like to be present. No consideration will be given to a tender received after the above stipulated time and date . Eligibility related documents shall be evaluated for criteria stipulated at 1.2.3 and agencies/contractors will accordingly be qualified/disqualified by the competent Authority. The financial bid (Envelope No 2) of qualified tenderer shall then be opened at notified time, date and place in presence of tenderer or their representative. The rates of each items must be quoted in figures and words.

**Tenderer's to study entire tender document carefully**

a) Submission of a tender by a tenderer implies that he has read all the stipulations contained in this booklet and all other contract documents and has acquainted himself of the nature, site conditions scope and specifications of the works to be executed and of conditions and rates at which stores will be issued to him by the IISER. The contractor shall also be deemed to have acquainted himself will local conditions and other factors which have a bearing on the execution of the works.

b) Before submitting the tender for the work of Fire Fighting System to IISER, the tenderer should thoroughly examine the existing conditions of site and proposed route of ring main for external and internal pipe work. He should also see the existing buildings, where fire fighting equipments/system shall be provided.

c) After award of the work contractor has to prepare and submit the shop drawings (only for air-conditioning / fabrication work) for approval of the Engineer-in-charge.

d) No claim will be entertained on account of ignorance of site conditions.

23. Every tender shall be written in the English language. All other information such as documents and drawings supplied by the tenderer will also be in the English language only. Drawings and designs shall be dimensioned according to the metric system of measurements. Tenders shall be forwarded under cover or a letter typewritten on the tenderer's letterhead and duly signed by the tenderer. Signature must be in long hand executed in ink by a duly authorised principal of the tendering firm. No oral, telegraphic or telephonic tenders or subsequent modifications there to shall be entertained.

24. The tenderer shall sign at the bottom right hand corner of every page of the tender documents in taken of acceptance of tender conditions and for the purpose of identification. Tenders containing erasures and alterations of the tender documents are liable to the rejected unless these are authenticated by the person signing the Tender Documents.

25. Tenders which do not full fill all or any of the conditions laid down in this notice, or contain conditions not covered and/or not contemplated by the General Conditions of contract and /or expressly prohibited therein or stipulated addition/alternative conditions shall be liable to be rejected.

26. The tenderer shall not be entitled to claim any costs, charges, expenses in connection with preparation and submission and subsequent clarification of his tender in the event of withdrawal of the invitation of tenders by the Institute.

27. The institute reserves the right to revise or amend the tender documents prior to the date notified for opening of the tenders and also the right to postpone the date of presentation and opening of tenders without assigning any reason, whatsoever.

28. The Director IISER, Mohali shall be referred as “Institute” in all the documents of Notice Inviting Tender/Contract Agreement.

29. Wherever the word ‘Engineer-in –Charge occurs it shall mean Executive Engineer of IISER Mohali.

**4.0**

**CONDITIONS OF CONTRACT**

**CONDITIONS OF CONTRACT**

1. 1. The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between competent authority on behalf of the Director, IISER 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. 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-

I) 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.

ii) The **site** shall mean the land/ or other places 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.

iii) 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.

iv) The **Institute** means the Director, IISER and his successors.

v) The **Engineer-in-charge** means the Executive Engineer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of the Director, IISER Mohali mentioned in schedule 'F' hereunder.

vi) **Institute** shall mean the Director IISER, Mohali.

vii) **Administration** shall mean the administration of the IISER Mohali.

viii) **Local authority** shall mean the municipal corporation of Mohali and shall also deemed to include any other body or department of the administration.

ix) **Accepting Authority** shall mean the authority mentioned in Schedule 'F'

x) **Excepted Risk** are risks due to riots (Other than those on account of contractor's employees) war (Whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Institute damages from aircraft, act of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by the Institute of part of the works in respect of which a certificate of completion has been issued or a cause solely due to the Institute's faulty design of works.

xi) **Market Rate** shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits.

xii) **Schedule(s)** referred to in these conditions shall mean the relevant schedule (s) annexed to the tender papers or the standard Schedule of Rates of the Institute mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.

xiii) **Department** means Director, IISER or any Division of IISER which invites tenders on behalf of Institute as specified in the Schedule 'F'.

xiv) **Tendered value** means the value of the entire work as stipulated in the letter of award.

xv) **Date of commencement of work:** The date of commencement of work shall be the date of start as specified in schedule 'F' 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 documents.

**Scope And Performance**

3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.

4. Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into considerations in the interpretation or construction thereof or of the contract.

5. The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.

**Works to be Carried out:**

6. 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 Quantities (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**

7. 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.

8.2 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 intentions of the document and his decision shall be final and binding on the contractor.

8.3 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.

### **Signing of Contract**

9. The successful tenderer/ contractor on acceptance of his tender by the Accepting authority, shall within 15 days from the stipulated date of start of the work sign the contract consisting of:-

i) The notice inviting tender, all the documents including drawings, if any forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.

ii) Standard form as mentioned in Schedule 'F' consisting of:

- a) Various standard clauses with corrections upto the date stipulated in Schedule 'F' along with annexure thereto.
- b) Safety Code.
- c) Model Rules for the protection of health, sanitary arrangements for workers employed by the contractor.
- d) Contractor's Labour Regulations.
- e) List of Acts and omissions for which fines can be imposed.

iii) No payment for the work done will be made unless contract is signed by the contractor.



--	--	--	--

**SCHEDULE 'D'**

Extra schedule for specific requirements/ documents for the work if any.

**SCHEDULE 'E'**

Reference to General Conditions of contract.

Name of Work : Construction of equalization tank at IISER Mohali

Estimated cost of work : Rs.11,86,300/-

Earnest Money : Rs. 24,000/-

(ii) Performance Guarantee : 5% of tendered value

(iii) Security Deposit : 5% of tendered value

(iv)

**SCHEDULE 'F'**

**REFERENCE TO GENERAL CONDITION OF CONTRACT**

**GENERAL RULES &  
DIRECTIONS**

Officer inviting tender

---

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

**Definations:**

2 (v)	<b>Engineer- in- charge</b>	Executive Engineer, IISER, Mohali.
2 (viii)	<b>Accepting Authority</b>	<u>Director, IISER.</u>
2 (x)	<b>Percentage on cost of material and labour to cover all overheads and profits</b>	15%
2 (xi)	<b>Standard Schedule of Rates</b>	DSR 2007.
2 (xii)	<b>Department</b>	IISER Mohali
9 (ii)	<b>Standard contract Form</b>	General Conditions of Contract

**Clause 1**

- |      |   |         |
|------|---|---------|
| (i)  | Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance | 15 days |
| (ii) | Maximum allowable extension beyond the period provided in (i) above                                 |         |



**Clause 2** Authority for fixing compensation under clause-2 Director IISER, Mohali.

**Clause 2A** Whether Clause 2A shall be applicable Yes / No

**Clause 5** Number of days from the date of issue of letter of acceptance for reckoning date of start 7 days

**Mile stone(S) as per table given below:-**

S. No .	Description of Milestone (Physical)	Time allowed in days (from date of start)	Amount to be withheld in case of non achievement of milestone

**Time allowed for execution of work,** 75 days

Authority to decide:

- (i) Extension of time Director IISER
  - (ii) Rescheduling of mile Clause applicable - (6 or 6A) Director IISER Mohali  
.....
- Clause 6, 6A**

**Clause 7 Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment**

Rs. ....

**Clause 10A**

List of testing equipment to be provided by the contractor at site lab

1	2	3
4	5	6

**Clause 10B(ii)**

Whether Clause 10 B (ii) shall be applicable

Yes / No

**Clause 10C**

Component of labour expressed as percent of value of work =

..... %

**Clause 10CA**

S.No	Material covered under this clause	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Base Price of all Materials covered under clause 10 CA*

\* Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

**Clause 10CC**

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column

.Not applicable

Schedule of component of other Materials, Labour, POL etc. for price escalation  
 Component of civil (except materials covered under clause 10CA) /Electrical construction Materials expressed as percent of total value of work. -

Xm .....%

Component of Labour - expressed as percent of total value of work.

Y .....%

Component of P.O.L. - expressed as percent of total value of work.

Z .....%

**Clause 11 Specifications be followed for execution of work.**

- i) NIT Specifications.
- ii) CPWD specifications with upto date amendments
- iii) Bureau of Indian Standards wherever no such specifications exists in S.No. i) & ii)

**Clauses 12**

**12.2 & 12.3** Deviation limit beyond which clause 12.2 & 12.3 shall apply for building work .....

**12.5** Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation work .....

**Clause 16**

**Competent authority for deciding reduced rates** Director, IISER, Mohali.

**Clause 18**

List of mandatory machinery, tools & plants to be deployed by the contractor at site:-

- |         |        |        |
|---------|--------|--------|
| 1 ..... | 2..... | 3..... |
| 4 ..... | 5..... | 6..... |
| 7 ..... | 8..... | 9..... |

**Clause 36 (i)**

Requirement of Technical Representative(s) and recovery Rate

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical Representative )	Minimum Expenditure	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)	
						Figures	Words

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers

**Clause 42**

- (i) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates ..... printed by C.P.W.D.
- (a) Variations permissible on theoretical quantities:
  - (a) Cement
    - For works with estimated cost put to tender not more than Rs. 5 lakh. 3% plus/minus.
    - For works with estimated cost put to tender more than Rs.5 lakh. 2% plus/minus.
- (iii) **Bitumen for all works** 2.5 % Plus only and NIL on minus side.
- (iv) **Steel reinforcement and structural steel sections for each diameter, section and category** 2% Plus/minus
- (v) **All other materials** NIL

**Recovery rates for quantities beyond permissible variation**

Sr. No.	Description of Item	Rates in figures and words at which recovery shall be made from the contractor	
		Excess beyond permissible variation	Less use beyond the permissible variation.
1.	Cement		
2.	Steel reinforcement		
3.	Structural sections		
4.	Bitumen issued free		
5.	Bitumen issued at stipulated fixed price.		

## Bill of Quantity

**Name of work: Construction of Equalization tank at IISER Mohali**

S.No	DSR 2007	Description	Qty	Unit	Rate	Amount
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.6.1	All kinds of soil.	350	cum		
2	2.21	Open timbering in case of shafts, wells, cesspits, manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered):				
	2.21.3	Depth exceeding 3 m but not exceeding 4.5 m.	150	sqm		
3	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	250	cum		
4	2.26	Extra for every additional lift of 1.5 m or part thereof in.				
	2.26.1	All kinds of soil.	200	cum		
5	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.10	graded stone aggregate 40 mm nominal size)	23	cum		
6	4.12	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.	500	per 50 kg cement		
7	4.15	Extra for laying concrete in or under water and/or liquid mud including cost of pumping or bailing out water and removing slush etc. complete.				
		<b>Note for item No. 4.15 :-</b> The quantity will be calculated by multiplying the depth measured from the sub-soil water level up to centre of gravity of concrete under sub-soil water level with quantity of concrete in cum executed under sub-soil water. The depth of centre of gravity shall be reckoned correct to 0.1m, 0.05m or more shall be taken as 0.1m and less than 0.05m ignored.	48	Cum per meter depth		

8	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6graded stone aggregate 20mm nominal size) over 75mm bed by dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth	60	sqm		
9	5.1	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	25.50	cum		
10	5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement :				
	5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	36.80	cum		
11	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	8	cum		
12	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	40	sqm		
	5.9.2	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	260	sqm		
	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	30	sqm		
13	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				



14	6.1	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	10	cum		
15	6.44	Brick edging 7cm wide 11.4cm. deep to plinth protection with bricks of class designation 75 including grouting with cement mortar 1:4 (1 cement : 4 fine sand)	60	mtr		
16	12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
	12.21.1	In 75x75mm deep chase	30	Mtr		
17	13.4	12 mm cement plaster of mix :				
	13.4.1	1:4 (1 cement: 4 coarse sand)	400	sqm		
18	20.2	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified diameter and length below the pile cap M 35 in cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with, bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).				
	20.2.1	300 mm dia piles	72	mtr		
19	NS	P/F of MS footrest, 20mm round nipple by chipping of concrete & welding to the reinforcement making good the surface all compete as per the direction of Engineer-in-Charge including Epoxy painting	16	no		

20	NS	P/F RCC manhole cover of size 0.560x0.560mm including P/F of MS frame all complete as per direction of Engineer-in-Charge	3	No.		
21	NS	P/L 2 layers of FRP (Fiber Reinforced each layer having thickness 0.8 mm including cleaning of surface, drying of surface were FRP have to be laid, making even the surface including flushing with the top of the tank, providing overlap all complete as per the direction of Engineer-in-Charge)	142	sqm		
22	NS	P/F MS vent pipe 3” (I/d) in the chases left out in the tank making good the surface all complete as per the direction of Engineer-in-Charge	2	No.		
		<b>Total</b>				

**(Contractor)**