

TECHNICAL BID

Name of work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus, New Delhi.

Sub Head1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2 : Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

CLIENT:

DIRECTOR NIPGR,
NEW DELHI

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TENDER DOCUMENT

Name of work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub Head1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2 : Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

CLIENT:

**DIRECTOR NIPGR,
NEW DELHI**

COST OF TENDER DOCUMENT:- Rs. 500/-

TENDER DOCUMENTS

Name of work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub Head1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2 : Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

Owner : Director, NIPGR Campus, New Delhi

Tender issued to : _____

**Place for submission/
Place opening of tender document:**

NIPGR Campus,
Aruna Asaf Ali Marg,
New Delhi-110067

Consultant Engineer
NIPGR Campus,
New Delhi

Last date for sale of tenders: 12.08.2016 before 16.00hrs.
Date/Time of submission : 16.08.2016 before 14.30hrs.
Date/Time of opening : 16.08.2016 at 15.00hrs.

Consultant Engineer
NIPGR Campus,
New Delhi.



TENDER FORM

To

The Director
NIPGR CAMPUS,
New Delhi.

Dear Sir,

I/We have read and examined the following Tender Documents relating to the "**Name of work** : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub Head1: Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2: Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

Tender Form

- Tender Notice
- General Conditions
- Instruction to bidders
- General Information
- Memorandum
- General conditions of contract
- Special terms and conditions of contract
- General site rules, procedures and precautions
- Schedule of Quantity
- Annexure I, II & III
- Drawings

I/We hereby offer to execute the work complete in all respects specified in the under written Memorandum within the time specified therein or during the allowed extended time at the rates specified in the bill of Quantities and in accordance, with the specifications, designs, drawings and instructions in writing referred to in the conditions of tender.

(Seal & Signature of Contractor)

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NATIONAL INSTITUTE OF PLANT GENOME RESEARCH
Aruna Asaf Ali Marg, Near ICSSR, JNU Campus, New Delhi – 110 067
Phone: 26735161 / 26735138 Fax: 26716658

F. No. NIPGR/Engg./7/4/2016-17

Dated: 25.07.2016

TENDER NOTICE

Sealed item rate Tenders are invited in two bid system on behalf of the Director, NIPGR, Aruna Asaf Ali Marg, New Delhi – 110 067, from approved and eligible contractors of CPWD / State PWD and those on approved list of MES, Railways, Autonomous Bodies, State / Central Govt. undertakings, and other reputed Scientific research Institutions so as to reach his office upto 2.30 P.M. on or before 16.08.2016 for the following work:

Name of work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub Head1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2 : Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

Sl. No.	Estimated Cost (In Rs.)	EMD (In Rs.)	Time for Completion	Last date & time for sale of Tender Documents	Date & time of submission / opening of tenders
1.	2.	3.	4.	5.	6.
1.	946800/-	18950/-	60 Days	<u>12.08.2016</u> 16.00 Hrs.	<u>16.08.2016</u> 14.30 Hrs. 15.00 Hrs.

Tender documents can be obtained up to 16.00 Hrs. on all working days on payment of ₹. 500.00 (₹. Five hundred only) in cash (Non-refundable) towards the cost of tender. The earnest money shall be in the form of Demand Draft of a Scheduled Bank issued in favour of the Director, NIPGR, New Delhi.

The tender documents can also be downloaded from our website www.nipgr.ac.in The tender documents downloaded from website must be accompanied with ₹. 500.00 (₹. Five hundred only) in form of Demand draft in Favour of the "Director, NIPGR, New Delhi" towards the cost of tender documents, otherwise the tender will not be considered.

The tender will be accepted in respect of those contractors having successfully completed at least three similar works of each value not less than ₹. 3.79 OR two similar work of each value not less than ₹.4.73/-Lacs OR one similar work of each value not less than ₹. 7.57 Lacs during the last three years ending 30th June 2016. Similar works means "Construction of RCC Tanks in Government organizations, Govt. Autonomous organizations, and other reputed Scientific research Institutions.

Intending tenderers must enclose self-attested copies of Completion Certificate of having completed the work satisfactorily issued by an authority. Original documents shall be produced by agency for verification at the time of opening of tender and documents can be verified from the issuing authority.

The Director, NIPGR, reserves the right to accept or reject all or any of the tender without assigning any reasons thereof.

Consultant Engineer
NIPGR, New Delhi



GENERAL CONDITIONS

1. **Sealed tenders on item rate basis are hereby invited from pre-qualified contractors for the work of "Name of work :** Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub Head1: Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2: Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

The tender document consists of Tender form, Notice inviting tender, Instructions to bidders, General Information, Schedule of quantity, General Conditions of contract Agreement, List of tests and technical specification, Bill of quantities etc. which can be had at a cost of Rs. 500.00 (Rs. Five hundred only) from the office of NIPGR, NIPGR, Aruna Asaf Ali Marg ,New Delhi. Purchase of tender document is obligatory on the part of the tenderers & bid in no other form will be accepted.

2. The tender documents shall be placed in sealed cover as mentioned in Procedure of Submission of tender and addressed to the Director, NIPGR Campus, New Delhi. The tender shall be received by the Director, NIPGR Campus, New Delhi before 14.30 hrs. on 16.08.2016 and shall be opened on the same day at 15.00 hrs. in presence of the tenderers or their authorized representatives who may like to be present. Any envelope received after the said date and time shall not be entertained under any circumstances and no consideration what so-ever shall be given to anything that might be contained in any such envelope.
3. The time allowed for the completion of work is 60 days to be reckoned from the 10th day after the date of written order to commence the work.
4. Every tender shall be accompanied by earnest money for ₹.18950/- (₹. Eighteen thousand and Nine hundred Fifty only) in the form of demand draft drawn in favour of the **Director, NIPGR payable at New Delhi**. Any tender not accompanied by such earnest money will be rejected straight away.
5. The contractor will submit his tender after examining the tender documents, scope of work, specifications, clauses, additional terms of contract agreement, special terms & conditions, bill of quantities etc.
6. The offer shall remain valid for 180 days from the date of opening of Tender. The value of tender can be increased or decreased and any item can be added, deleted, withdrawn or substituted without any notice as per the requirements of NIPGR without assigning any reason.
7. If a tenderer whose tender is accepted fails to undertake the work as per terms of the contract within 10 days to be reckoned from the date of issue of allotment letter, the earnest Money deposited will be forfeited.
8. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason.
9. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.
10. This notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR
11. The successful tenderer shall have to sign the contract agreement within 10 days of the allotment of work.
12. The contractor should visit the site and make them self-acquainted with the location of site. The Department shall not entertain any extra claim later on.
13. The site of work is at NIPGR Campus, Aruna Asaf Ali Marg New Delhi-110067.
14. Electricity if required shall be provided by the Institute free of Cost.

Consultant Engineer
NIPGR, New Delhi

Seal & Sign of Contractor

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INSTRUCTIONS TO BIDDERS

1. GENERAL INSTRUCTIONS:

The works referred here-in shall cover the entire scope of the proposal which includes supplying of material and resurfacing of road work and construction of parking area road including the successful completion and the tests which the NIPGR desires to get carried out. The "Owner" where appearing in these documents shall mean Director, NIPGR,

2. PROCEDURE FOR SUBMISSION OF TENDERS:

The following procedure shall be adopted for submission and opening of tenders The sealed envelope **SUPERSCRIBED** Tender for: "Name of work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

- Sub Head1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.
- Sub Head2 : Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

ENVELOPE NO.- 1

This envelope shall contain only the earnest money deposit & technical bid and will be opened first.

ENVELOPE NO.- 2

This sealed envelope shall contain the financial bid of the contractor as per bill of quantities. This envelope shall be opened only after the EMD contained in envelope No.1 & technical bid is found in order as per the requirements of NIPGR. The date of opening of price bid shall be intimated later on.

The sealed cover containing envelope 1 & 2 shall be opened on the prescribed date and time in the presence of tenderers or their authorized representatives who may wish to be present.

3. TENDERERS TO STUDY ENTIRE TENDER DOCUMENT CAREFULLY:

Submission of a tender by a tenderer implies that he has read all the stipulations contained in this tender document and has acquainted himself of the nature, scope and specifications of the works to be followed.

4. TENDERER TO SUBMIT THE ENTIRE TENDER DOCUMENT:

The tenderer shall submit all documents issued to him for the purpose of this tender after duly filling the same in all respects. Tenders which are found to be vague or incomplete shall be rejected summarily.

5. TENDERERS TO QUOTE FOR ALL ITEMS:

The tenderer shall quote his rates in words and figures with reference to each item and must enter for all the items shown in the attached Bill of quantities. Incomplete offer shall be liable for rejection. In case there is a discrepancy in "words" and "figures", the rate in words will be taken as correct for evaluation of tender. All quantities should be calculated as per percentage given by the contractor and total should be given of every sub head and grand total should also be given of all heads.

6. VALIDITY PERIOD OF OFFERS:

The rates quoted in the tender shall hold good for 180 days from the date of opening of the tender. The validity period shall be extendable with the mutual consent of both the parties. No tenderer can withdraw/or modify his tender or revoke the same within the said period of 180 days. If a tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within a period of aforesaid 180 days his earnest money deposit shall stand forfeited.

7. TENDERER TO SIGN ALL PAGES:

The tenderer shall stamp and sign at the bottom right hand corner of every page of the tender documents in token of acceptance of tender conditions and for the purpose of identification.

8. ERASURES AND ALTERATIONS:

Tenders containing erasures and alterations of the tender documents are liable to be rejected unless these are authenticated by the person signing the Tender Documents.

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9. TENDERER TO SATISFY HIMSELF OF SITE CONDITIONS:

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender regarding nature of the site conditions, the means of access of the site, the accommodation they may require and in general obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender in any manner. A tenderer shall be deemed to have full knowledge of the site, whether he inspects it or not and no compensation or otherwise of any charges incurred or to be incurred consequent on any misunderstanding or otherwise shall be admissible.

10. EARNEST MONEY:

The tender shall be accompanied by earnest money of ₹.18950/- (₹. Eighteen thousand and Nine hundred Fifty only) in the form of Demand Draft only drawn in favour of the **Director, NIPGR payable at New Delhi**. Earnest money of the unsuccessful bidder(s) shall be refunded after expiry of the validity period of the tenders/allotment of works whichever is earlier.

11. TENDERER TO QUOTE BOTH IN FIGURES AND WORDS:

All tenderers shall quote the rate in figures as well as in words, the amount of each item shall be worked out and the requisite total given. Special care shall be taken to write percentage in figures and words, and the amount in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words.

12. TENDER LIABLE TO REJECTION:

Tenders which do not fulfill all or any of the conditions laid down in this notice, or contain conditions not covered and / or not contemplated by the Conditions of contract and/or expressly prohibited therein or stipulate additional/alternative conditions shall be liable to be rejected and his earnest money will be forfeited.

Tenders shall also be liable for rejection on any of the following grounds :-

- i) Tenders submitted late
- ii) Tenders containing remarks uncalled for.
- iii) Conditional tenders
- iv) Tenders not submitted on prescribed Performa.
- v) Telegraphic tenders.

13. CORRESPONDENCE:

Tenderers must mention their postal address and telephone number(s) of the Chief Executive/authorized agent or attorney in the tender. The tender submitted by the tenderer will be rejected if he or his agent cannot be contacted on the last known address or on the intimated telephone number(s) after reasonable search in which event earnest money may be forfeited by the NIPGR.

14. NIPGR NOT TO ASSIGN ANY REASON FOR REJECTION OF TENDER:

NIPGR hold absolute discretion to accept or reject the lowest or any other tender without assigning any reason. No claim on this account shall be entertained.

15. AMENDMENT IN TENDER DOCUMENTS:

NIPGR reserves the right to revise or amend the Bid Documents upto the date prior to the date notified for opening of the tenders and also the right to postpone the date of submission and opening of tenders without assigning any reason, whatsoever.

16. REFERENCE IN TENDER DOCUMENTS:

Director, NIPGR, shall be referred as "Owner" in all the documents of Tender documents/contract agreement.

Seal & Sign of Contractor

Consultant Engineer
NIPGR, New Delhi



GENERAL INFORMATION

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|----|---|---|
| 1 | Accepting Authority | Director,
NIPGR, New Delhi. |
| 2 | Reference Book | i) CPWD specifications(Latest
as on date of tender)
ii)B.I.S. specifications(latest edition) |
| 3 | Earnest money | ₹.18950/- (₹. Eighteen thousand and Nine hundred Fifty
only)to be furnished with the tender in the form of the demand
draft (No interest is payable on security deposit) |
| 4 | Security deposit | The security deposit will be collected by deductions from the
running bills of the contractors at the rate mentioned below and
the earnest money, if deposited at the time of tender, will be
treated as part of security deposit. Performance security may
be accepted as Bank Guarantee/DD of Scheduled Banks and
State Bank of India. A sum @ 10% of the gross amount of the
bill shall be deducted from each running bill of the contractor till
the sum along with the sum already deposited as earnest
money, will amount to Security Deposit of 5% of the tendered
value of the work. In addition, the contractor shall be required
to deposit an amount equal to 5% of the tendered value of the
contract as Performance Security within the period prescribed
for commencement of work in the letter of award issued to him. |
| 5 | Authority competent to grant
extension of time | Director, NIPGR or authorized person by Director, NIPGR |
| 6 | Tools & plants | To be arranged by contractor |
| 7 | Schedule of Minimum wages | As per notification issued by CPWD/NCT. |
| 8 | Authority competent to
reduce the compensation
amount | Director ,NIPGR |
| 9 | Defect Liability Period | One year from the date of acceptance of completion by the
NIPGR. |
| 10 | Release Security Deposit | The performance security shall be refunded to the contractor
on completion of the work and recording of completion
certificate by Institute and the security deposit of 5%of work
done shall be released after defect liability period. However if
the agency fail to complete the work to the satisfaction of the
consultant Engineer or violates any condition of the work
order/tender. The security deposit/performance security will be
forfeited/bank guarantee will be revoked. |
| 11 | Periodicity of submission
Of interim Bills | Once in a month. |
| 12 | Authority Competent to
Appoint Arbitrator | Director, NIPGR |

Seal, Sign of Contractor

Consultant Engineer
NIPGR, New Delhi



MEMORANDUM

- a) Name of work Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.
Sub Head 1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area **Sub Head 2**: Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP
- b) Estimated cost 9.47 Lacs.
- c) Earnest money ₹.18950/- (₹. Eighteen thousand and Nine hundred Fifty only) in the form of Demand Draft in favour of NIPGR payable at New Delhi. (No interest is payable on earnest money).
- d) Time allowed for the completion of work (to be reckoned from 10th day after the date of issue of written order to commence work) 60 Days

Place
Date:

(Seal & Signature of Contractor)

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GENERAL CONDITIONS OF CONTRACT AGREEMENT

SECURITY DEPOSIT

The person/persons whose tender may be accepted (herein after called the contractor) shall permit NIPGR at the time of making any payment to him for works done under the contract to deduct such sum as will amount to 10 % of all moneys so payable to be held by the NIPGR, by way of security deposit. Earnest money and performance guarantee shall also be adjustable towards this security deposit. All compensation or other sums of money payable by the contractor to NIPGR under terms of this contract may be deducted from his security deposit or from any account what so ever, and in the event of his security deposit being reduced by reason of any such deduction, the contractor shall within 10 days thereafter make good in cash any sum or sums which may have been deducted from his security deposit or any part thereof.

COMPENSATION CLAUSE

Being a time bound contract, and the contractor shall be liable to pay penalty @1.0% per week subject to maximum of 10% of quoted amount if the work is not completed within stipulated time of Completion.

The Contractor shall be responsible for any damages and site clearance and nothing extra will be paid. In case the site clearance and damages are not attended, a recovery amounting to Rs. 50,000/- (Rs. fifty thousand only) shall be made.

Provided always that the entire amount of compensation to be paid under the provisions of this clause shall not exceed ten percent of the awarded cost of work as shown in the tender. The Director, NIPGR, on a representation from the Contractor, is however; empowered to reduce the amount of compensation and his decision in writing shall be final.

In any case under which any clause or clause of this contract the contractor shall have rendered himself liable to pay compensation to NIPGR on behalf of the Director, NIPGR, shall have power to adopt any of the following courses as he may deem best suited in the interest of the NIPGR.

To rescind the contract (of which rescission notice in writing to the contractor under the hand of NIPGR shall be conclusive evidence), and in which case the security deposit of the contractor shall stand forfeited, and be absolutely at the disposal of Director, NIPGR.

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

TIME EXTENSION

If the contractor shall desire an extension of the time limit for completion of the work on the grounds of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the Director, NIPGR within 5 days of the date of the hindrance on account of which he desires such extensions as aforesaid but before the expiry of time limit and the NIPGR, if in his opinion(which shall be final)reasonable grounds as shown thereof, authorized such extension of time if any, as may, in his opinion be necessary or proper.

COMPLETION OF WORK

Without prejudice to the rights of Institute under any clause hereinafter contained on completion of the work, the contractor shall be furnished with a certificate to NIPGR of such completion, but no such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work has been executed, all scaffolding, surplus materials and rubbish, and cleaning off the dirt from all doors, walls, floors, or any other parts of buildings said to have been completed, and the measurements in the said certificate shall be binding and conclusive against the contractor, if the contractor shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus materials, and rubbish and cleaning off dirt on or before the date fixed for the completion of the work, by NIPGR may at the expense of the contractor have removed such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forth with pay the amount of all expenses so incurred, and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any such sale proceeds actually realized by the sale thereof.

ADDITIONS/ALTERATIONS

The Director, NIPGR shall have power to make any alterations or omissions or additions or substitutions in the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and the contractor shall be bound to carry out

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the work in accordance with any instructions which may be given to him in by the Director, NIPGR and such alterations, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work which the contractor may be directed to carry out in the manner above specified as part of the work shall be carried out by the contractor on same conditions in all respects on which he agreed to do the main work. The time for the completion of the work shall be extended in the proportion that the altered additional or substituted work has to the main work at the sole discretion of the Director, NIPGR and his decision in this regard shall be final and binding on the contractor.

The rates for the additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order:

- i) If the rates for the additional, altered or substituted work are specified in the contract for the main work, the contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract for the main work.
- ii) In case the rates for such items do not exist in the main contract but are available in the CPWD Schedule of rates, the same shall be derived on the basis of the percentage above/below the approved contract cost to the estimated cost for the work put to tender.
- iii) In the event, there is no similar class of work specified in clause(i) & (ii) above, the contractor shall work out a rate for each item on the basis of the prevalent market rates and submit the same together with the detailed analysis to the NIPGR within a period of 7 days from the day that the order for the relevant items are issued by the NIPGR. The market rates of material & labour shall be as finally determined by the NIPGR. Contractor's profit shall be admissible @10% on the cost of material & labour. In case there is a difference between the rates quoted by the contractor and the rates found unacceptable by the NIPGR, the latter shall within a fortnight of submission, conduct necessary negotiations with the contractor to arrive at a mutually agreeable rate. NIPGR, reserves to himself the right to cancel his order to carry out such work and arrange to carry it out in such manner as he may deem fit. But under no circumstances the contractor shall suspend the work on the plea of non settlement of rates for items falling under the clause.

ARBITRATION

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, designs, 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 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 completion or abandonment thereof shall be referred to the sole arbitration of the person selected from out of a panel of names to be supplied upon a request in writing by party invoking the arbitration by the Director, NIPGR, at the time of the dispute. It will be no objection to any such appointment that the arbitrator so appointed was associated with the work and that he had to deal with the matters to which the contract relates and that in the course of his duties in association with the Director NIPGR, he had expressed views on all or any of the matters in dispute or difference. The arbitrator to whom the matter is originally referred being unable to act for any reason, the Director shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is also a term of this contract that no person other than a person appointed by the Director as aforesaid shall act as arbitrator. In all cases where the amount of the claim in dispute is Rs. 50,000/- (Rs. Fifty thousand only) or above, the arbitrator shall give reasons for the award.

Subject as aforesaid the provisions of Arbitration and Cancellation Act 1996 or any statutory modifications or reenactment thereof and the rules framed thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of the contract that while invoking arbitration the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this Clause together with the amount or amounts claimed in respect of each such dispute.

It is also a term of the contract that if a party does not make any demand for arbitration in respect of any claim(s) in writing within 90 days of receiving the intimation from the NIPGR that the bill is ready for payment, the claim if any, shall be deemed to have been waived and absolutely barred and the owner shall be discharged and released of all liabilities under the contract in respect of these claims.

The Arbitrator should be of the rank of retired / working Chief Engineer (CPWD) or (B & R) Delhi or equivalent post. The contractor will be entitled to file only those claims for arbitration which had already been raised before the NIPGR and rejected by him time to time during the execution of work.

CARRYING OUT OF WORK

All the work shall be carried out in accordance with CPWD specifications prevalent as on date of tender & strictly as per the specifications given in the tender to the total satisfaction of the NIPGR. In the case of

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an item for which specification are not available in the said specifications relevant BIS specifications applicable as on the date of tenders shall be followed.

QUALITY CONTROL OF MATERIAL

If it shall appear to the Director, NIPGR 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 are unsound, or of a quality inferior to that contracted for or otherwise not in accordance with contract, the contractor shall on demand in writing from the NIPGR specifying the work materials or articles complained of not with standing that the same may have been inadvertently passed, certified and paid for forthwith rectify, or remove & reconstruct the work so specified in whole or in part, as the case may require, or as the case may remove the materials or articles so specified and provide other proper and suitable material or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by Director, NIPGR in his demand as aforesaid then the contractor shall be liable to pay compensation at the rate of 1% on the contract agreement of work for everyday not exceeding 10 days, while his failure to do so shall continue and in the case of any such failure the NIPGR may rectify or remove, and re-execute the work or replace with other, materials or articles complained of as the case may be at the risk and expense in all respects of the contractor.

INSPECTION OF WORK

All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision to NIPGR for the work and the contractor shall at all times, during the usual working hours and at all other times at which reasonable notice of the intention of the NIPGR to visit the works shall have been given to the contractor, either himself be present to receive order 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.

The contractor shall give not less than 5 days notice in writing to NIPGR, of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is so covered up or placed beyond the reach of measurement and any work without the consent in writing of NIPGR, NIPGR or placed beyond the reach of measurement without such notice having been given to or consent obtained, the same shall be uncovered at the contractor's expense or in default thereof, no payment or allowance shall be made for such work of the materials with which the same was executed.

The work during its progress shall from time to time inspected by the Engineer or their consultants on behalf of Director, NIPGR and the contractor shall extend all co-operation to the inspection of the work.

**Consultant Engineer
NIPGR, New Delhi**

Seal & Sign of Contractor

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SPECIAL TERMS AND CONDITIONS OF CONTRACT

1. SPECIFICATIONS:

If specifications for an item of work are not covered by the CPWD Specifications/B.I.S. Specifications prevailing as on date of tender, the same shall be decided by the NIPGR and shall be binding on the contractor.

The Director shall have the power to insist upon the contractor to purchase and use such materials of particular approved make which may in his opinion be necessary for proper and reasonable compliance with the specifications and execution of work.

In the event of any variation/discrepancy in the drawings, specification and tender documents the decision of the architect shall be final binding and conclusive on the contractor.

a) As required by Director, NIPGR, the contractor shall provide all facilities at site or at manufacturer's works or an approved laboratory for testing of materials and/or workmanship. All the expenditure in respect of this shall be borne by the contractor wherever applicable. The contractor shall, when required to do so by Director, NIPGR submit manufacturer's certificate that the materials have been tested in accordance with requirements of the specifications.

b) Neither the omission by Director, NIPGR to test the materials nor the production of manufacturer's certificate etc., as aforesaid shall affect the right of the NIPGR to reject after delivery the materials found not in accordance with the specifications.

2. WORK AND WORKMANSHIP:

To determine the acceptable standard or workmanship, the NIPGR may order the contractor to execute certain portions of works and services and the like under the close supervision of Engineer, NIPGR/Consultant. On approval, these items shall be labeled as guiding samples and works executed to conform to these samples.

3. Testing of Material

a) As required by the NIPGR, the contractor shall provide all facilities at site or at manufacturer's work or an approved laboratory for testing of materials and / or workmanship. All the expenditure in respect of this shall be borne by the contractor unless specified otherwise in the contract. The contractor shall when required to do so by the NIPGR, submit that the materials have been tested in accordance with requirements of the specifications.

b) Neither the omission by the NIPGR to test the materials nor the production of manufacture(s) certificate etc. as aforesaid shall affect the right of the NIPGR to reject, after delivery the materials found not in accordance with the specifications.

4. The contractor shall prepare shop drawings of each discipline & get it approved from the Architect before the commencement of work. The contractor shall submit fabrication drawing in triplicate for obtaining preliminary approval of the NIPGR for all design drawings. One copy of this drawings duly corrected and signed wherever necessary by Architect will be returned to the contractor for preparing and resubmitting drawings after incorporating the said corrections again in triplicate for final approval. Along with the completion and approval of fabrication drawing, the contractor shall also submit the materials list, for checking and approval to the Architect. No drawing shall be approved finally without material list. Once the drawing is finally approved, no request for any alternative section will be entertained. The contractor shall also submit to Architect 8 prints of all approved drawings. The contractor shall also submit 4 copies of design calculations for the designs of joints. All joints shall be designed for full strength of members, unless otherwise specified. Approval of fabrication drawings however will not absolve the contractor of his responsibility for the safety and correctness of the fabrication.

5. CONTRACTOR TO BE LIABLE FOR ALL TAXES ETC.

The rates specified in the tender shall be inclusive of sales taxes, VAT, service tax, toll, Customs fees, octroi, royalty etc. or any other taxes. However if any fresh taxes are imposed by State/Central/Statutory bodies during the currency of contract, the same shall be borne by NIPGR.

6. FORCE MAJEURE:

The right of the contractor to proceed with the work shall not be terminated because of any delay in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the contractor, including not limited to acts of God, or of the public enemy, restraints of a sovereign state, firms, floods, unusually severe weather.

N ✓

7. APPROVAL OF SAMPLES

Before undertaking fabrication of item or any item of work for use in work the contractor shall arrange and manufacture at his own cost the relevant samples which shall be approved by NIPGR. These samples will be sealed by the NIPGR in the presence of the contractor, if he so desires and shall remain in the custody of the NIPGR for reference and comparison till the completion of work.

8. JURISDICTION:

Not with standing any other courts having jurisdiction to decide the questions forming subject matter of a suit any and all actions and proceedings arising out of or relative to this contract (including any arbitration in terms thereof) shall lie only in the court of competent Civil jurisdiction in this behalf at New Delhi., where this contract is to be signed on behalf of Director NIPGR and only the said court shall have jurisdiction to try any such actions and/or proceedings to the exclusion of all other courts.

9. SCOPE OF WORK:

The scope of work is as per enclosed preliminary drawings. The contractor should note that during the preparation of detailed working drawings, according to which the contractor has to execute the work covered under this contract, may undergo changes. The scope drawings for the entire work are not enclosed, but only a few indicating the probable nature of construction are attached. The scope of work is thus not limited only to the drawings attached.

10. CONTRACTOR'S RESPONSIBILITY FOR THE MANNER OF EXECUTION OF WORKS

The contractor shall be solely responsible for the manner and the method of executing the work. The work shall be subject to the approval of NIPGR from time to time for purposes of determination of the question whether the work is executed by the contractor in accordance with the contract.

11. NO WORK SHALL BE UNDERTAKEN WITHOUT APPROVED WORKING DRAWINGS:

No work shall be undertaken at site by the contractor until detailed approved working drawings marked "Good" for execution/construction is issued by the Architect in writing. Any work done without the aforesaid working drawing shall be at the contractor's own risk and costs.

12. SUBMISSION OF BILLS:

Contractor is to submit the bills and record of measurements in triplicate on approved Performa of the NIPGR for works executed by him. The Bill shall be submitted **once in a month**.

13. ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK:

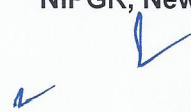
If it shall appear to NIPGR, NIPGR or his representatives, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to the contracted for, or otherwise not in accordance with the contract CPWD specifications/B.I.S. specifications the contractor shall on demand in writing from the Architect specifying the work materials, articles complained or not with-standing that the same have been inadvertently 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, remove the materials or articles so specified and provide other and suitable materials or articles so specified at his own cost and in the event of his failing to do so within a period to be specified by the architect in his demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding ten days while his failure to do so that continue and in the case of any such failure NIPGR, NIPGR may rectify or remove, and re-execute the work or remove and replace with other materials or articles complained of, as the case may be at risk and expenses in all respects of the contractor.

14. The works shall be inspected by Engineers / Consultants of NIPGR. The contractor shall extend full co-operation and render all necessary facilities for inspection of the work to the inspecting authority without any additional cost to NIPGR. It must be noted that any observations/ comments/ recommendations of the said Technical consultants shall be binding on the contractor.

15. It shall always prevail, unless otherwise specifically stated, that the entire provisions of Tender document been opened upon and accepted for compliance by the contractor without any reservation.

Seal & Sign of Contractor

**Consultant Engineer
NIPGR, New Delhi**



GENERAL SITE RULES, PROCEDURES AND PRECAUTIONS

1 SITE WORKING RULES AND REGULATIONS

a) The contractor shall furnish Director, NIPGR the Power of Attorney name and signature of his authorized representative who will be in-charge of the execution of the works at site. The contractor shall also furnish the list of technically qualified persons employed by him for execution of the works. Daily reports of number of men employed by crafts and weekly reports of progress achieved, expected date of completion of the works and any actual or potential delays stating the reasons thereof shall be furnished by the contractor.

b) Save as otherwise specifically provided in this Agreement the rates and prices herein, unless otherwise stipulated elsewhere in this Agreement, include all the costs, expenses and outlays of the contractor for executing the works and fulfilling all the obligations of the Contractor under this agreement.

**Consultant Engineer
NIPGR, New Delhi**

Seal & Sign of Contractor



SCHDULE OF QUANTITIES

ITEM NO.	DESCRIPTION OF ITEM	QTY.	UNIT	RATE	AMOUNT
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Attached at pages 22

Should this tender be accepted, in whole or in part I/We hereby agree to abide by and fulfill all the terms & provisions of the conditions of tender as applicable or in default there of a sum of for ₹.9310/- (₹. Nine thousand and three hundred ten only) deposited by me/us as earnest money in favour of Director , New Delhi., shall stand absolutely forfeited to NIPGR.

I/We agree:

- (i) that should I/We fail to commence the work specified in the above mentioned Memorandum the NIPGR without prejudice to any other right or remedy shall be at liberty to forfeit the earnest money. Otherwise the said earnest money shall be retained and adjusted towards security deposit mentioned in the above Memorandum
- (ii) to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein.

The names and postal addresses and contract phone nos. of our representative(s) authorized to deal with this tender are:

1)

2)

3)

Dated the _____ day of _____ 2016.

Signature of Tenderer



Schedule of Quantity(Sub Head-I)

Name of Work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub: Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
		PART-A : SUB STRUCTURE			
1		Earth work excavation over areas in foundation of tank, pits, trenches etc. <i>in all soils other than soft and hard rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding 230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc. complete as per specifications, drawings including spreading, levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	15.00	a) Depth not exceeding 1.50 M from ground level		Cum	
2		Earth work excavation over areas in foundation of tank, pits, trenches etc. <i>in soft rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding 230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc. complete as per specifications, drawings including spreading, levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	30.00	a) Depth not exceeding 1.50 M from ground level		Cum	
3		Earth work excavation over areas in foundation of tank, pits, trenches etc. <i>in hard rock</i> by chiselling upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation, staking the excavated materials or disposing of the surplus earth within a distance of 50 M. etc. complete as per specifications, drawings & as directed by the Engineer-in-charge.			
	18.00	a) Depth not exceeding 1.50 M from ground level		Cum	
	12.00	b) Depth exceeding 1.50 M but not exceeding 3 M from ground levels		Cum	
4	4.00	Cement concrete 1:3:6 in foundation plinth, supports using graded stone aggregate of 20mm. maximum size including necessary form work, machine mixing, transporting, placing in position consolidation, finishing, curing etc. in all works upto plinth level complete as per specifications as directed including dewatering if necessary during the progress of work.		Cum	
		PART-B STRUCTURAL WORKS			
		FOR R.C.C. WORKS			
		a) All RCC shall be controlled concrete unless otherwise specified and shall be carried out strictly in accordance with the drawings and specifications.			
		b) The rates for RCC works shall be exclusive of cost of reinforcement and form work unless otherwise mentioned.			
		c) All coarse aggregate to be 20mm. maximum size and uniformly graded unless otherwise mentioned.			
		d) The controlled concrete grade M-20 shall be water tight controlled concrete and if any defective work is found during the testing of the tank, the contractor has to set right the same with pressure cement grouting etc. to the satisfaction of the Engineer in Charge at his own cost. (No extra payment will be admissible on this account)			
		e) For all RCC items, the rates quoted shall include the following without any extra cost to the Department.			
		i.) Spacers to maintain clear cover for reinforcement.			
		ii) Drip moulds.			
		iii) Fixing at correct level and in proper alignment the inserts, pipe sleeves, pipe bends, fan hooks, other pipe specials etc. if supplied by the Department unless otherwise specified.			
		iv) slabs in panels of 150mm width, construction joints etc.			
		v) forming of curvatures, roundings slopes, chamfers, notches, cornices etc. unless otherwise mentioned.			
		vi) all concrete surfaces shall be closely hacked as per specifications and as directed by the Engineer in Charge, wherever required.			
		vii) extra cement required for grouting and cement concrete, if any			
		viii) testing of water tightness and set right the defects if any			

Not To be Filled

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
5		Reinforced cement concrete of M-20 grade with minimum cement content 330kg/cum of concrete conforming to IS 456-1978, at all floors and levels using graded stone aggregate of 20mm. and down graded including machine mixing, conveying, placing in position, mechanical consolidation, finishing, curing, scaffolding , dewatering if necessary and testing the concrete for water tightness,rectification of defects if any including pressure cement grouting if required etc. complete all as per drawing & specifications, but excluding the cost of form work and steel rein- forcement (which shall be paid under relevant item)			
	6.00	a) In raft slab, raft beam etc.		Cum.	
	12.00	b)In columns,walls		Cum.	
	7.00	c) In beams, slabs etc.		Cum.	
6		Providing, erecting, fixing in position striking /removing and cleaning steel /timber shuttering & centering for form work in super structure at all level & locations for all shapes with chamfers, splays ,keys, wedges, rails ,bracings,props, brackets, cutting holes for pipes etc.including necessary staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including close hacking of all exposed concrete work after removal of form work, all materials, labour dewatering if necessary etc. complete as per specifications, drawings & as directed by the E-I-C. (Area of form work in contact with concrete shall only be measured for payment & stop boards for construction joints will not be measured for payment)			
	10.00	a) In sides of raft slab,raft beams etc.		Sqm.	
	120.00	b) in walls.		Sqm.	
	30.00	c) In slabs,etc.		Sqm.	
7		Reinforcement for RCC work at contractor's own cost including supplying,delivering and storing of various diametres as required at site of work transporting, decoiling, straightening, cutting, bending, placing in position at all depths, locations levels and binding with 18-20 gauge,soft drawn annealed steel binding wire complete as per specifications and drawings. (Cost of binding wire shall be borne by the contractor & binding wire shall not be measured for payment.)			
7a)	1000.00	High Yield Strength deformed bars or tor steel or grip bars Grade Fe 415 conforming to IS 1786-1966 conforming to IS 1786-1966		Kg	
		PART-C : GENERAL FINISHING WORKS			
8		Cement concrete IPS (1:2:4) for waterproof			
		flooring of thickness mentioned below using graded stone aggregate 12 mm max. size including supplying and adding waterproof materials as per manufacturer's recommendation, laid to level or slopes in alternate bays including form work consolidation, finishing smooth or chequered with a floating coat of cement, curing etc. complete as per specifications and drawing.			
8a)	30.00	a) IPS 40 mm thick over tank base slab in scour pits/flooring etc.		sqm.	
9		Waterproof cement plaster of thickness mentioned below with neat cement finish for the internal concrete walls /ceilings and beams of the tank at all heights with CM. 1:4 using graded coarse sand ,including approved quality water proofing materials in proportion as recommended by the manufacturer to correct line ,level ,plain and plumb including preparing surfaces , scaffolding , double scaffolding ,curing etc. complete all as per specifications and drawings			
9a)	95.00	a) 20mm thick in two coats for inside walls and inner surface of outer walls etc.		Sqm	
10		Providing patented cement based waterproofing treatment from outside to tank raft slab and walls, basement, trenches and underground structures during construction, consisting of a waterproofing layer over cement concrete 1:3:6 bedding finished with 20mm thick well pointed in the joints with cement and approved waterproofing compound as per manufacturer's specifications and continuing the treatment after completion of floor slab and side wall on the outer face of walls and upto a height of 500mm above the adjacent ground level. The total thickness of waterproofing treatment shall be about 75mm for floors and about 35 to 40mm for walls.			

Not To be Filled

Schedule of Quantity(Sub Head-II)

Name of Work :Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub:Augmentation of Existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at

ETP

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
		PART-A : SUB STRUCTURE			
1		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in all soils other than soft and hard rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc.complete as per specifications, drawings including spreading,levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	12.00	a) Depth not exceeding 1.50 M from ground level		Cum	
2		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in soft rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc.complete as per specifications, drawings including spreading,levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	18.00	a) Depth not exceeding 1.50 M from ground level		Cum	
3		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in hard rock</i> by chiselling upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation , staking the excavated materials or disposing of the surplus earth within a distance of 50 M. etc.complete as per specifications, drawings & as directed by the Engineer-in-charge.			
	12.00	a) Depth not exceeding 1.50 M from ground level		Cum	
	12.00	b) Depth exceeding 1.50 M but not exceeding 3 M from ground levels		Cum	
4	5.00	Cement concrete 1:3:6 in foundation plinth, supports using graded stone aggregate of 20mm.maximum size including necessary form work, machine mixing, transporting, placing in position consolidation, finishing, curing etc.in all works upto plinth level complete as per specifications as directed including dewatering if necessary during the progress of work.		Cum	
		PART-B STRUCTURAL WORKS			
		FOR R.C.C. WORKS			
		a) All RCC shall be controlled concrete unless otherwise specified and shall be carried out strictly in accordance with the drawings and specifications.			
		b) The rates for RCC works shall be exclusive of cost of reinforcement and form work unless otherwise mentioned.			
		c) All coarse aggregate to be 20mm. maximum size and uniformly graded unless otherwise mentioned.			
		d) The controlled concrete grade M-20 shall be water tight controlled concrete and if any defective work is found during the testing of the tank , the contractor has to set right the same with pressure cement grouting etc. to the satisfaction of the Engineer in Charge at his own cost.(No extra payment will be admissible on this account)			
		e) For all RCC items, the rates quoted shall include the following without any extra cost to the Department.			
		i.) Spacers to maintain clear cover for reinforcement.			
		ii)Drip moulds.			
		iii) Fixing at correct level and in proper alignment the inserts, pipe sleeves, pipe bends, fan hooks, other pipe specials etc. if supplied by the Department unless otherwise specified.			
		iv) slabs in panels of 150mm width ,construction joints etc.			
		v) forming of curvatures , roundings slopes, chamfers,notches,cornices etc. unless other wise mentioned.			
		vi) all concrete surfaces shall be closely hacked as per specifications and as directed by the Engineer in Charge , wherever required.			
		vii) extra cement required for grouting and cement concrete , if any			
		viii) testing of water tightness and set right the defects if any			
		ix) cleaning of water tank after test/before handing over to be done to the entire satisfaction of the engineer in charge.			

NOT TO BE FILLED

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
5		Reinforced cement concrete of M-20 grade with minimum cement content 330kg/cum of concrete conforming to IS 456-1978, at all floors and levels using graded stone aggregate of 20mm. and down graded including machine mixing, conveying, placing in position, mechanical consolidation, finishing, curing, scaffolding , dewatering if necessary and testing the concrete for water tightness,rectification of defects if any including pressure cement grouting if required etc. complete all as per drawing & specifications, but excluding the cost of form work and steel rein- forcement (which shall be paid under relevant item)			
	7.00	a) In raft slab, raft beam etc.		Cum.	
	18.00	b)In columns,walls		Cum.	
	4.00	c) In beams, slabs etc.		Cum.	
6		Providing, erecting, fixing in position striking /removing and cleaning steel /timber shuttering & centering for form work in super structure at all level & locations for all shapes with chamfers, splays ,keys, wedges, rails ,bracings,props, brackets, cutting holes for pipes etc.including necessary staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including close hacking of all exposed concrete work after removal of form work, all materials, labour dewatering if necessary etc. complete as per specifications, drawings & as directed by the E-I-C. (Area of form work in contact with concrete shall only be measured for payment & stop boards for construction joints will not be measured for payment)			
	10.00	a) In sides of raft slab,raft beams etc.		Sqm.	
	120.00	b) in walls.		Sqm.	
	48.00	c) In slabs,etc.		Sqm.	
7		Reinforcement for RCC work at contractor's own cost including supplying,delivering and storing of various diametres as required at site of work transporting, decoiling, straightening, cutting, bending, placing in position at all depths, locations levels and binding with 18-20 gauge,soft drawn annealed steel binding wire complete as per specifications and drawings. (Cost of binding wire shall be borne by the contractor & binding wire shall not be measured for payment.)			
7a)	800.00	High Yield Strength deformed bars or tor steel or grip bars Grade Fe 415 conforming to IS 1786-1966 conforming to IS 1786-1966		Kg	
		PART-C : GENERAL FINISHING WORKS			
8		Cement concrete IPS (1:2:4) for waterproof			
		flooring of thickness mentioned below using graded stone aggregate 12 mm max. size including supplying and adding waterproof materials as per manufacturer's recommendation, laid to level or slopes in alternate bays including form work consolidation, finishing smooth or chequered with a floating coat of cement, curing etc. complete as per specifications and drawing.			
8a)	18.00	a) IPS 40 mm thick over tank base slab in scour pits/flooring etc.		sqm.	
9		Waterproof cement plaster of thickness mentioned below with neat cement finish for the internal concrete walls /ceilings and beams of the tank at all heights with CM. 1:4 using graded coarse sand ,including approved quality water proofing materials in proportion as recommended by the manufacturer to correct line ,level ,plain and plumb including preparing surfaces , scaffolding , double scaffolding ,curing etc. complete all as per specifications and drawings			
9a)	48.00	a) 20mm thick in two coats for inside walls and inner surface of outer walls etc.		Sqm	
10		Providing patented cement based waterproofing treatment from outside to tank raft slab and walls, basement, trenches and underground structures during construction, consisting of a waterproofing layer over cement concrete 1:3:6 bedding finished with 20mm thick well pointed in the joints with cement and approved waterproofing compound as per manufacturer's specifications and continuing the treatment after completion of floor slab and side wall on the outer face of walls and upto a height of 500mm above the adjacent ground level. The total thickness of waterproofing treatment shall be about 75mm for floors and about 35 to 40mm for walls.			

NOT TO BE FILLED

(Undertaking on a Non-Judicial Stamp Paper worth Rs. 100/- duly notarized)

I / We (bidder) hereby give an undertaking that:

- a) I/We have not been blacklisted during last three years by any Govt. Department/Govt. Autonomous Body/Institution, etc.;
- b) I/We do not have any dispute with any of the Govt. Departments/Govt. Autonomous Bodies/Institutions, etc.;
- c) I/We have never been certified as 'Unsatisfactory Performer' for the said services provided to the Govt. Departments/Govt. Autonomous Bodies/Institutions;
- d) I/We have not submitted any fake/forged certificates/documents and later, if any such 'Certificates/Documents' found to be fake/forged or contains willful wrong/incorrect information, suitable legal action may be initiated against me/us/agency besides 'forfeiture of Earnest Money Deposit' and 'Blacklisting' etc.
- e) I/We shall not withdraw my/our bid after opening of Technical Bid and if done so, the NIPGR shall be authorized to forfeit the EMD submitted by me/us.

Seal and Signature of the Authorized
Person of the Agency

Name and designation of the
Authorized Person of the Agency

Place:

Date:

✓
✓

'CERTIFICATE FOR SITE INSPECTION'
Pre-qualification criteria of NIT

Certificate that we have visited the site on and assessed the nature and amount of maintenance work involved before submitting our offer. We will be able to complete the maintenance works within the stipulated time and also that we will be able to execute the maintenance work suit to the site conditions.

(Signature of Bidder with Seal)

Name:

Address:

Date:

Consultant Engineer

✓
✓

CHECK-LIST FOR PRE-QUALIFICATION BID FOR Provision of Under Ground RCC Water storage tanks at NIPGR Campus, New Delhi.

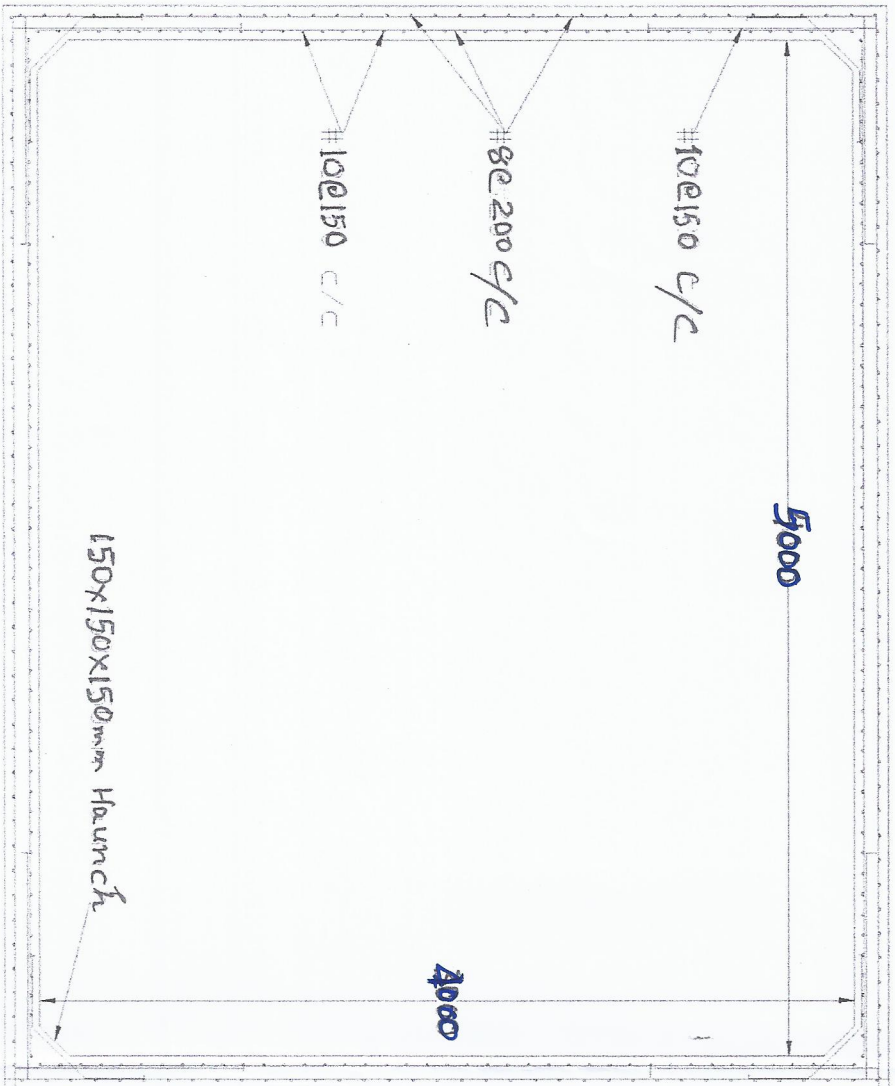
Sub Head1 : Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2 : Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

Sl. No.	Documents asked for	Page number at which document is placed
1.	Tender Cost	
2.	Earnest Money	
3.	Name of authorized person of the firm/agency, designation, address and office telephone numbers. If the bidder is a partnership firm/private or limited company, name designation, address and office telephone numbers of partners/ Directors also.	
4.	Undertaking on a Non-judicial Stamp Paper of ₹ 100/- (as per format prescribed in Annexure-I) after award of maintenance work.	
5.	Self-attested copy of the PAN card issued by the Income Tax Department with copy of Income-Tax Return of the last financial year.	
6.	Self attested copy of Service Tax Registration No.	
7.	Proof of experiences of last three years ending April 30, 2016 as specified in the NIT along with satisfactory performance certificates from the concerned employers.	
8.	Annual turnover of last three financial years ending June 30, 2016 duly certified by the Statutory Auditors.	
9.	Any other documents, if required.	

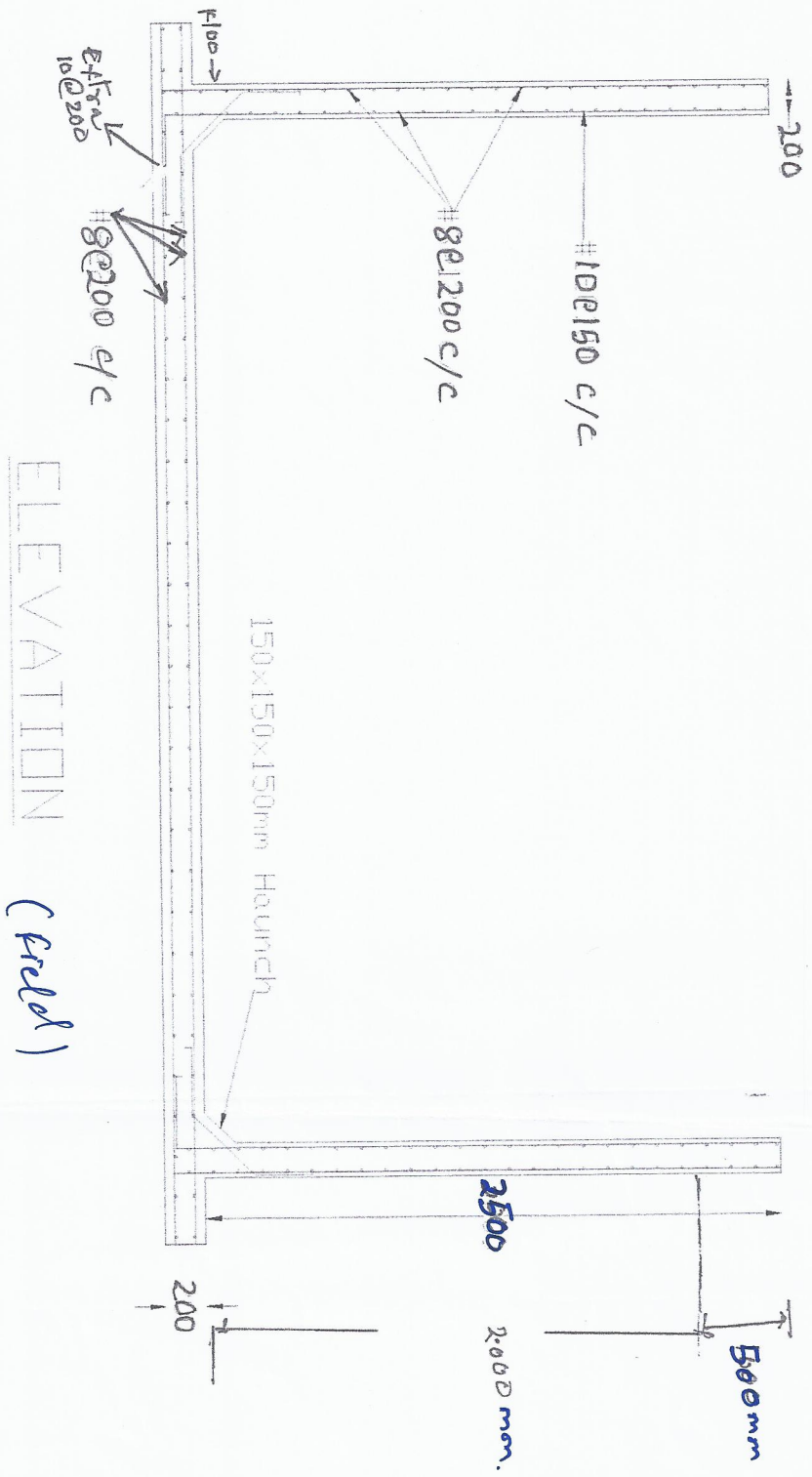
Signature of the Bidder
(Name and Address of the Bidder)
Telephone No.

Detailing

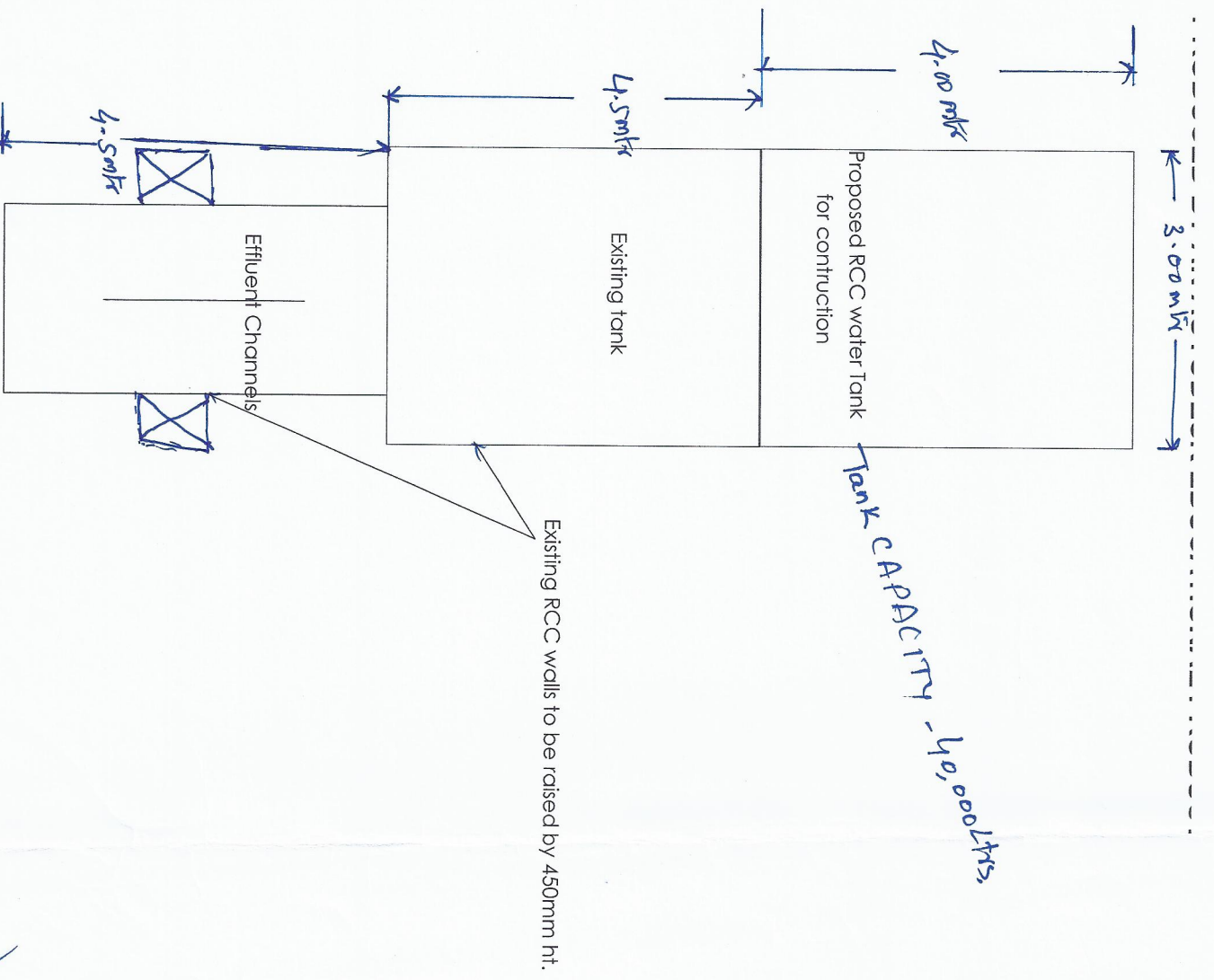


PLAN (Field) capacity - 50,000 kN.

Detailing



ELEVATION (Field)



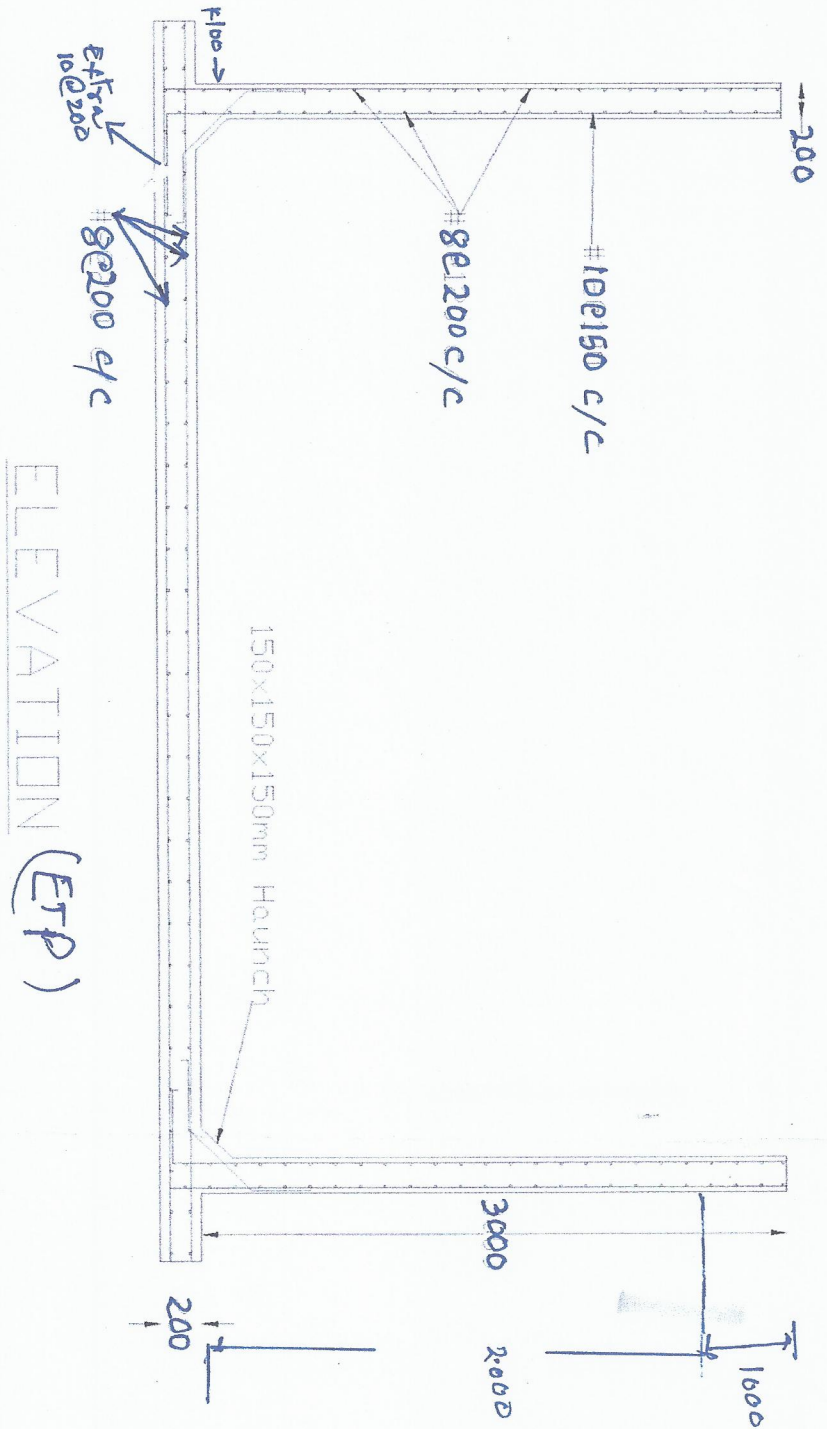
Plan for Construction of ETP at NIPGR Campus new
Effluent collection tank of Delhi

✓
✓

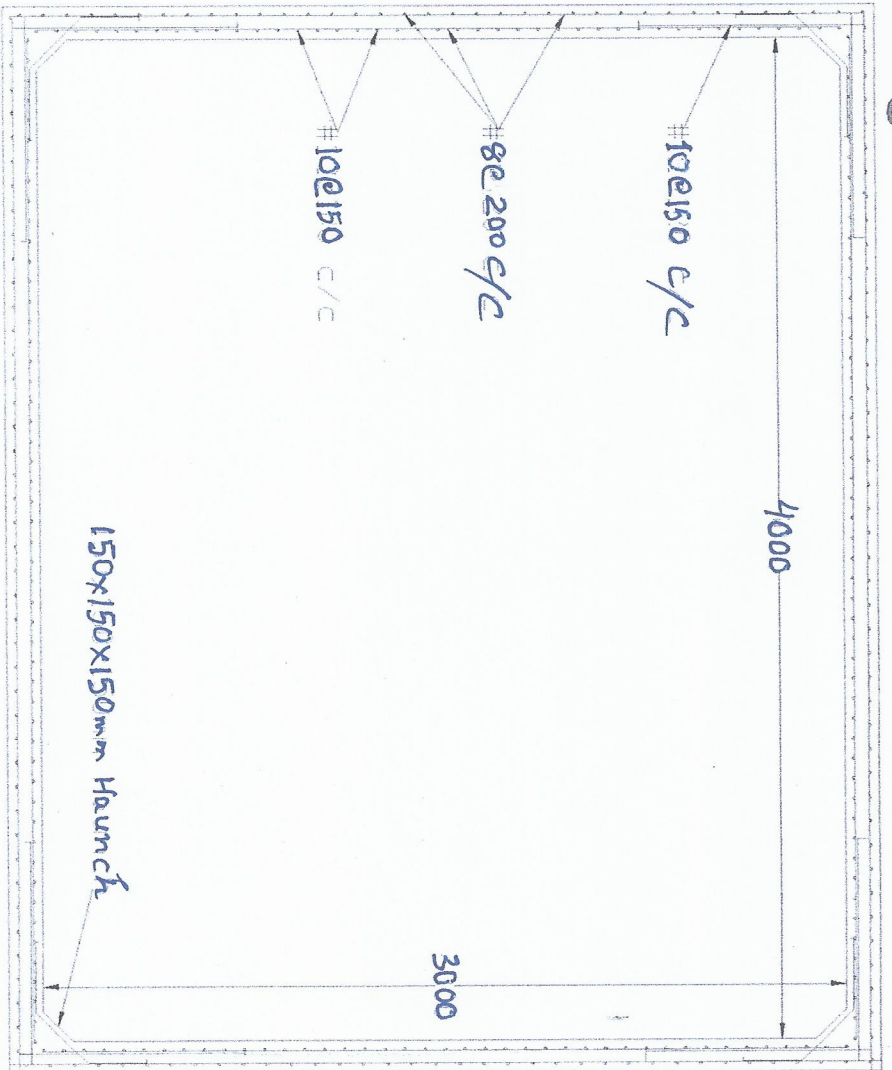
Base Slab

- The slab is resting on firm ground. Hence nominal thickness and reinforcement is provided. The thickness of slab is assumed to be 200 mm and 0.24% reinforcement is provided in the form of #8 @ 200 c/c. at top and bottom
- A haunch of 150 x 150 x 150 mm size is provided at all corners

Detailing



Detailing



PLAN (ETP)

FINANCIAL BID

Name of work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus, New Delhi.

Sub Head1: Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

Sub Head2: Augmentation of existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

CLIENT : DIRECTOR NIPGR
NEW DELHI

Schedule of Quantity(Sub Head-I)

Name of Work :Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub:Provision of Under Ground RCC water storage tanks of capacity 50000 ltrs. at field area.

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
		PART-A : SUB STRUCTURE			
1		Earth work excavation over areas in foundation of tank, pits, trenches etc. <i>in all soils other than soft and hard rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding 230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc.complete as per specifications, drawings including spreading,levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	15.00	a) Depth not exceeding 1.50 M from ground level		Cum	
2		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in soft rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding 230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc.complete as per specifications, drawings including spreading,levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	30.00	a) Depth not exceeding 1.50 M from ground level		Cum	
3		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in hard rock</i> by chiselling upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation , staking the excavated materials or disposing of the surplus earth within a distance of 50 M. etc.complete as per specifications, drawings & as directed by the Engineer-in-charge.			
	18.00	a) Depth not exceeding 1.50 M from ground level		Cum	
	12.00	b) Depth exceeding 1.50 M but not exceeding 3 M from ground levels		Cum	
4	4.00	Cement concrete 1:3:6 in foundation plinth, supports using graded stone aggregate of 20mm.maximum size including necessary form work, machine mixing, transporting, placing in position consolidation, finishing, curing etc.in all works upto plinth level complete as per specifications as directed including dewatering if necessary during the progress of work.		Cum	
		PART-B STRUCTURAL WORKS			
		FOR R.C.C. WORKS			
		a) All RCC shall be controlled concrete unless otherwise specified and shall be carried out strictly in accordance with the drawings and specifications.			
		b) The rates for RCC works shall be exclusive of cost of reinforcement and form work unless otherwise mentioned.			
		c) All coarse aggregate to be 20mm. maximum size and uniformly graded unless otherwise mentioned.			
		d) The controlled concrete grade M-20 shall be water tight controlled concrete and if any defective work is found during the testing of the tank , the contractor has to set right the same with pressure cement grouting etc. to the satisfaction of the Engineer in Charge at his own cost.(No extra payment will be admissible on this account)			
		e) For all RCC items, the rates quoted shall include the following without any extra cost to the Department.			
		i.) Spacers to maintain clear cover for reinforcement.			
		ii)Drip moulds.			
		iii) Fixing at correct level and in proper alignment the inserts, pipe sleeves, pipe bends, fan hooks, other pipe specials etc. if supplied by the Department unless otherwise specified.			
		iv) slabs in panels of 150mm width ,construction joints etc.			
		v) forming of curvatures , roundings slopes, chamfers,notches,cornices etc. unless other wise mentioned.			
		vi) all concrete surfaces shall be closely hacked as per specifications and as directed by the Engineer in Charge , wherever required.			
		vii) extra cement required for grouting and cement concrete , if any			
		viii) testing of water tightness and set right the defects if any			

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
5		Reinforced cement concrete of M-20 grade with minimum cement content 330kg/cum of concrete conforming to IS 456-1978, at all floors and levels using graded stone aggregate of 20mm. and down graded including machine mixing, conveying, placing in position, mechanical consolidation, finishing, curing, scaffolding , dewatering if necessary and testing the concrete for water tightness,rectification of defects if any including pressure cement grouting if required etc. complete all as per drawing & specifications, but excluding the cost of form work and steel rein- forcement (which shall be paid under relevant item)			
	6.00	a) In raft slab, raft beam etc.		Cum.	
	12.00	b)In columns,walls		Cum.	
	7.00	c) In beams, slabs etc.		Cum.	
6		Providing, erecting, fixing in position striking /removing and cleaning steel /timber shuttering & centering for form work in super structure at all level & locations for all shapes with chamfers, splays ,keys, wedges, rails ,bracings,props, brackets, cutting holes for pipes etc.including necessary staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including close hacking of all exposed concrete work after removal of form work, all materials, labour dewatering if necessary etc. complete as per specifications, drawings & as directed by the E-I-C. (Area of form work in contact with concrete shall only be measured for payment & stop boards for construction joints will not be measured for payment)			
	10.00	a) In sides of raft slab,raft beams etc.		Sqm.	
	120.00	b) in walls.		Sqm.	
	30.00	c) In slabs,etc.		Sqm.	
7		Reinforcement for RCC work at contractor's own cost including supplying,delivering and storing of various diametres as required at site of work transporting, decoiling, straightening, cutting, bending, placing in position at all depths, locations levels and binding with 18-20 gauge,soft drawn annealed steel binding wire complete as per specifications and drawings. (Cost of binding wire shall be borne by the contractor & binding wire shall not be measured for payment.)			
7a)	1000.00	High Yield Strength deformed bars or tor steel or grip bars Grade Fe 415 conforming to IS 1786-1966 conforming to IS 1786-1966		Kg	
		PART-C : GENERAL FINISHING WORKS			
8		Cement concrete IPS (1:2:4) for waterproof			
		flooring of thickness mentioned below using graded stone aggregate 12 mm max. size including supplying and adding waterproof materials as per manufacturer's recommendation, laid to level or slopes in alternate bays including form work consolidation, finishing smooth or chequered with a floating coat of cement, curing etc. complete as per specifications and drawing.			
8a)	30.00	a) IPS 40 mm thick over tank base slab in scour pits/flooring etc.		sqm.	
9		Waterproof cement plaster of thickness mentioned below with neat cement finish for the internal concrete walls /ceilings and beams of the tank at all heights with CM. 1:4 using graded coarse sand ,including approved quality water proofing materials in proportion as recommended by the manufacturer to correct line ,level ,plain and plumb including preparing surfaces , scaffolding , double scaffolding ,curing etc. complete all as per specifications and drawings			
9a)	95.00	a) 20mm thick in two coats for inside walls and inner surface of outer walls etc.		Sqm	
10		Providing patented cement based waterproofing treatment from outside to tank raft slab and walls, basement, trenches and underground structures during construction, consisting of a waterproofing layer over cement concrete 1:3:6 bedding finished with 20mm thick well pointed in the joints with cement and approved waterproofing compound as per manufacturer's specifications and continuing the treatment after completion of floor slab and side wall on the outer face of walls and upto a height of 500mm above the adjacent ground level. The total thickness of waterproofing treatment shall be about 75mm for floors and about 35 to 40mm for walls.			
10a)	30.00	a) for floors		Sqm	

Schedule of Quantity(Sub Head-II)

Name of Work : Provision of Under Ground RCC Water storage tanks at NIPGR Campus New Delhi.

Sub: Augmentation of Existing water storage tanks and Provision of Under Ground RCC Water storage tank of capacity 40000 ltrs. at ETP

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
		PART-A : SUB STRUCTURE			
1		Earth work excavation over areas in foundation of tank, pits, trenches etc. <i>in all soils other than soft and hard rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding 230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc. complete as per specifications, drawings including spreading, levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	12.00	a) Depth not exceeding 1.50 M from ground level		Cum	
2		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in soft rock</i> upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation & refilling allaround the foundation/ tank (after testing) with selected excavated earth, in layers not exceeding 230mm. thick watering consolidation and disposing of the surplus earth within a distance of 50 M. etc. complete as per specifications, drawings including spreading, levelling the surplus disposed earth in required grade / profile & as directed by the Engineer-in-charge.			
	18.00	a) Depth not exceeding 1.50 M from ground level		Cum	
3		Earth work excavation over areas in foundation of tank ,pits, trenches etc. <i>in hard rock</i> by chiselling upto depth mentioned below including shoring & dewatering if necessary, dressing the sides, trimming, ramming and preparing the bed for foundation , staking the excavated materials or disposing of the surplus earth within a distance of 50 M. etc. complete as per specifications, drawings & as directed by the Engineer-in-charge.			
	12.00	a) Depth not exceeding 1.50 M from ground level		Cum	
	12.00	b) Depth exceeding 1.50 M but not exceeding 3 M from ground levels		Cum	
4	5.00	Cement concrete 1:3:6 in foundation plinth, supports using graded stone aggregate of 20mm. maximum size including necessary form work, machine mixing, transporting, placing in position consolidation, finishing, curing etc. in all works upto plinth level complete as per specifications as directed including dewatering if necessary during the progress of work.		Cum	
		PART-B STRUCTURAL WORKS			
		FOR R.C.C. WORKS			
		a) All RCC shall be controlled concrete unless otherwise specified and shall be carried out strictly in accordance with the drawings and specifications.			
		b) The rates for RCC works shall be exclusive of cost of reinforcement and form work unless otherwise mentioned.			
		c) All coarse aggregate to be 20mm. maximum size and uniformly graded unless otherwise mentioned.			
		d) The controlled concrete grade M-20 shall be water tight controlled concrete and if any defective work is found during the testing of the tank , the contractor has to set right the same with pressure cement grouting etc. to the satisfaction of the Engineer in Charge at his own cost. (No extra payment will be admissible on this account)			
		e) For all RCC items, the rates quoted shall include the following without any extra cost to the Department.			
		i.) Spacers to maintain clear cover for reinforcement.			
		ii) Drip moulds.			
		iii) Fixing at correct level and in proper alignment the inserts, pipe sleeves, pipe bends, fan hooks, other pipe specials etc. if supplied by the Department unless otherwise specified.			
		iv) slabs in panels of 150mm width ,construction joints etc.			
		v) forming of curvatures , roundings slopes, chamfers, notches, cornices etc. unless other wise mentioned.			
		vi) all concrete surfaces shall be closely hacked as per specifications and as directed by the Engineer in Charge , wherever required.			
		vii) extra cement required for grouting and cement concrete , if any			
		viii) testing of water tightness and set right the defects if any			
		ix) cleaning of water tank after test/ before handing over to be done to the entire satisfaction of the engineer in charge.			

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
5		Reinforced cement concrete of M-20 grade with minimum cement content 330kg/cum of concrete conforming to IS 456-1978, at all floors and levels using graded stone aggregate of 20mm. and down graded including machine mixing, conveying, placing in position, mechanical consolidation, finishing, curing, scaffolding , dewatering if necessary and testing the concrete for water tightness,rectification of defects if any including pressure cement grouting if required etc. complete all as per drawing & specifications, but excluding the cost of form work and steel reinforcement (which shall be paid under relevant item)			
	7.00	a) In raft slab, raft beam etc.		Cum.	
	18.00	b)In columns,walls		Cum.	
	4.00	c) In beams, slabs etc.		Cum.	
6		Providing, erecting, fixing in position striking /removing and cleaning steel /timber shuttering & centering for form work in super structure at all level & locations for all shapes with chamfers, splays ,keys, wedges, rails ,bracings,props, brackets, cutting holes for pipes etc.including necessary staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including staging for all clear story height providing & applying approved form oil on all surfaces of form work coming in contact with concrete including close hacking of all exposed concrete work after removal of form work, all materials, labour dewatering if necessary etc. complete as per specifications, drawings & as directed by the E-I-C. (Area of form work in contact with concrete shall only be measured for payment & stop boards for construction joints will not be measured for payment)			
	10.00	a) In sides of raft slab,raft beams etc.		Sqm.	
	120.00	b) in walls.		Sqm.	
	48.00	c) In slabs,etc.		Sqm.	
7		Reinforcement for RCC work at contractor's own cost including supplying,delivering and storing of various diametres as required at site of work transporting, decoiling, straightening, cutting, bending, placing in position at all depths, locations levels and binding with 18-20 gauge,soft drawn annealed steel binding wire complete as per specifications and drawings. (Cost of binding wire shall be borne by the contractor & binding wire shall not be measured for payment.)			
7a)	800.00	High Yield Strength deformed bars or tor steel or grip bars Grade Fe 415 conforming to IS 1786-1966 conforming to IS 1786-1966		Kg	
		PART-C : GENERAL FINISHING WORKS			
8		Cement concrete IPS (1:2:4) for waterproof			
		flooring of thickness mentioned below using graded stone aggregate 12 mm max. size including supplying and adding waterproof materials as per manufacturer's recommendation, laid to level or slopes in alternate bays including form work consolidation, finishing smooth or chequered with a floating coat of cement, curing etc. complete as per specifications and drawing.			
8a)	18.00	a) IPS 40 mm thick over tank base slab in scour pits/flooring etc.		sqm.	
9		Waterproof cement plaster of thickness mentioned below with neat cement finish for the internal concrete walls /ceilings and beams of the tank at all heights with CM. 1:4 using graded coarse sand ,including approved quality water proofing materials in proportion as recommended by the manufacturer to correct line ,level ,plain and plumb including preparing surfaces , scaffolding , double scaffolding ,curing etc. complete all as per specifications and drawings			
9a)	48.00	a) 20mm thick in two coats for inside walls and inner surface of outer walls etc.		Sqm	
10		Providing patented cement based waterproofing treatment from outside to tank raft slab and walls, basement, trenches and underground structures during construction, consisting of a waterproofing layer over cement concrete 1:3:6 bedding finished with 20mm thick well pointed in the joints with cement and approved waterproofing compound as per manufacturer's specifications and continuing the treatment after completion of floor slab and side wall on the outer face of walls and upto a height of 500mm above the adjacent ground level. The total thickness of waterproofing treatment shall be about 75mm for floors and about 35 to 40mm for walls.			

S.N.	QTY.	DESCRIPTION OF ITEM	RATE	UNIT	AMOUNT
10a)	18.00	a) for floors		Sqm	
10b)	60.00	b) for walls		Sqm	
		Note :- I) the measurement for payment shall be as per actual area covered by the treatment			
		ii) A working space of about 600mm shall have to be provided in the excavation separately for treatment of exterior faces of walls and will be measured under relevant item.			
		iii) The cost of cement concrete 1:3:6 is not included in this and is to be catered for measurement separately in the relevant item.			
11	2.00	Providing and fixing 40mm dia G.I.pipes spout of approx. 400mm length including cutting the pipes to required length,making holes in the RCC structure or brick work, reinstating the same to the original condition including using water proofing compound,curing etc complete all as directed by the engineer-incharge & as shown in the drg		Metre	
12	10.00	Providing orange colour safety foot rest of minimum 6mm thick plastic encapsulated as per IS : 10910 on 12 mm dia steel bar conforming to IS: 1786 having minimum cross section as 23mmx 25mm and over all minimum length 263mm and width as 165mm with minimum 112mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing with 30*20*15cm cement concrete block 1:3:6(1 cement :3 coarse sand :6 graded sone aggregate 20mm nominal size) complete as per design.		Each	
		Special Note :- All Water proffing work.			
		a) The contractor shall test the surface where water proofing treatment provided for bone dry condition by filling up with water. No wet patches or leaks shall appear on the surrounding wall or under side of the slab.			
		b) The contractor shall furnish guarantee bond on appropriae stamp paper for the entire waterproffing treatment for maintaining the surroundings and under side surfaces of the waterproffing treatment in bone dry condition for 5 years. During the gurantee period the contractor shall attend all leakages, defects etc. if noticed, free of cost, starting the work of checking upand rectification within a week's time from the date of intimation about such leak-ages/defects.			
13	1.00	Supply, Installation, testing commissioning of Non clog submesible pumps with discharge capcity of 9cum/HR @10m head.Type of Impeller-VORTEX, Stainless Steel,Max Particle size-35mmhaving SS casting SS impeller complete with mechanical Seal & accessories,motor of required capacitydelivery header with isoloation valve,presure gauge on delivery line with isolation cock,pump shall have said flow and head all complete.(make Grundfos, Willo)		Each	
14	30.00	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. from under ground tank to over head tank as per requirement at site all complete as per direction of Engineer-in-charge.		Mtr	
15	1.00	SITC of armered cable of 2.5sqmm copper cable with earthing to be laid in MS conduit from the under ground tank to main panel inside ETP Plant room with MCB and stater panel in main panel all complete as per direction of Engineer-in-charge		Mtrs.	
Total Amount(Sub Head II)					
(In words Rs.-----)					
Net Total Amount (Sub Head I+Sub Head II)					
Seal & Sign of Agency					
Consultant Engineer,NIPGR					

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