



राष्ट्रीय पृथ्वी विज्ञान अध्ययन केंद्र  
NATIONAL CENTRE FOR EARTH SCIENCE STUDIES



पृथ्वी विज्ञान मंत्रालय, भारत सरकार

Ministry of Earth Sciences, Government of India

पी बी नं. 7250, आक्कुलम, तिरुवनन्तपुरम- 695011, भारत

PB No. 7250, Akkulam, Thiruvananthapuram-695011, India

NCESS

EAM/CW/041c/2019/NCESS

16/04/2019

**TENDER DOCUMENT**

**Sub: Laboratory for Experimental Measurement of Settling Velocity of sediment particles**

Director, National Centre for Earth Science Studies, invites sealed competitive quotations from eligible contractors of CPWD and State PWDs, MES, Railways, BSNL, Irrigation Department, KWA for the above work, in NCESS campus, Thiruvananthapuram.

Quotations should be submitted in the prescribed format attached.

**Last date of tender: 26.04.2019, 12pm**

**Tender opening: 26.04.2019, 3pm**

EMD: Rs.6000/-

State Bank of India (SBI)  
Bank account number: 57059896404 (CESS main)  
IFSC code: SBIN0070581

Tenders not accompanied by EMD, will be rejected.

**Important Note:**

1. The intending bidders may read out and clearly understand the Terms and Conditions.
2. All statutory dues are to be remitted by the contractor. TDS will be deducted as per rules. A copy of pan card and ID proof details should also be provided.
3. **A copy of the CPWD/ PWD/ MES/ Railways/ BSNL/ Irrigation Department/ KWA license duly attested should be enclosed.**
4. The bid document can be seen and downloaded from website [ncess.gov.in](http://ncess.gov.in)

दूरभाष/Phone : +91- 471- 2511502, 2511525, 2511721, 2917178

फेक्स/Fax : +91- 471- 2442280(Director), 471-511525(Chief Manager)

ई-मेल/E-mail : [director.ncess@nic.in](mailto:director.ncess@nic.in) , [chiefmanager.ncess@nic.in](mailto:chiefmanager.ncess@nic.in)

वेबसाइट/Website : [www.ncess.gov.in](http://www.ncess.gov.in)

Committed to Our Earth Our Future

हमारे भविष्य हमारी पृथ्वी के लिए प्रतिबद्ध



## NATIONAL CENTRE FOR EARTH SCIENCE STUDIES

Ministry of Earth Science Studies  
PB No. 7250, Akkulam,  
Thiruvananthapuram-695011

EAM/CW/041c/2019/NCESS

08/04/2019

### Laboratory for Experimental Measurement of Settling Velocity of sediment particles

#### TERMS AND CONDITIONS

1. The tenderer should see the document for details of the tender conditions and pre-qualification criteria in their own interest, at the website.
2. The Director, NCESS reserves the right to accept or reject all or any of the quotations.
3. The successful tenderer should execute an agreement with NCESS on a stamp paper worth Rs.200/-.
4. **All Bidders have to deposit EMD of Rs.6000/- in NCESS account number as detailed above.**
5. All statutory dues compliance legal and labour requirements and remittance are to be remitted by the contractor. TDS will be deducted as per rules.
6. A copy of pan card and ID proof details of contractor should also be provided. The contractor to whom the work is awarded should have valid income tax PAN number. **Statutory deduction of Income Tax will be made from the bill.**
7. Payment will be made against the bills, duly verified and certified by the authorized officer /agency of NCESS. Payment will be made only through NEFT, in favour of the Contractor.
8. No increase of rates or extension of time for work completion will be allowed.
9. No advance payment or part payment will be made in any circumstances and payment will be made only on the presentation of the final bill and subject to satisfactory certification by the intender.
10. It is mandatory to produce Income-tax returns, Pan and GST number.
11. The bank details for the refund of EMD should be furnished along with the bid.
12. It should be clear whether the quoted amount is inclusive of tax or not. If the tax is extra, the current tax rates should be specifically mentioned.

Senior Manager



## NATIONAL CENTRE FOR EARTH SCIENCE STUDIES

Ministry of Earth Science Studies  
PB No. 7250, Akkulam,  
Thiruvananthapuram-695011

EAM/CW/041c/2019/NCESS

16/04/2019

Laboratory for Experimental Measurement of Settling Velocity of sediment particles

### TENDER FORM

No	Details	To Be Filled by the Bidder
1	Name of Bidder	
2	Address of the Bidder	
3	Mobile and Telephone Number	
4	E mail ID	
5	PAN NO (copy should be enclosed)	
6	PWD/CPWD/BSNL/Railway/Irrigation/KWA Civil License Number (copy should be enclosed)	
7	Experience of the Contractor, copy to be enclosed	

### DECLARATION

1. The above facts are true to the best of my knowledge and I shall be held fully responsible for any wrong statement.
2. I have read the tender notice and understood the terms and conditions for this work as laid down by National Centre for Earth Science Studies, Trivandrum and I agree to abide the terms and conditions of the contract and also agree to undertake the work as per the description and as per rates quoted by me if my quotation is accepted.
3. Copy of PAN Card & PWD /CPWD license duly attested is enclosed.

Date

Name & Signature of the Tenderer

## Laboratory for Experimental Measurement of Settling Velocity of sediment particles

1. Sealed tenders are invited by **Director**, NCESS for and on behalf of the National Centre for Earth Science Studies from registered contractors of P.W.D. / Kerala Water Authority / Kerala State Electricity Board or Central Public works Department or MES or Railway class A, for the work.

2. The items and sub-heads of works to be done are enumerated in the subjoined schedule. Unless otherwise specified, the tender must be for the whole or any individual work and part tenders are liable to rejection. A contractor may tender for more than one work with the earnest money deposit specified in each case, but shall not tender for any part of a work only, unless specifically so required.

3. All works shall be done in conformity with the specifications and conditions of contract in force in the National Centre for Earth Science Studies. In case of schedule rate contract tenderers must quote only a single rate as an overall percentage above or below or at the rate given in the schedule by a single entry at the bottom of the schedule under the head quoted rate may be made by the contractor by serving only the irrelevant parts and attending all corrections. The rates quoted shall be in figures and words and shall be inclusive ones, covering all the operations contemplated in the specifications and tender schedules and all incidental work necessary for such operations such as shoring, bailing, form work, scaffolding. etc. "The rates quoted shall be inclusive of GST".

(a) When tenders are delivered based on contractor's alternated designs such tenders should be accompanied by a schedule of quantities of materials to be used for each item of work with complete detailed specifications and data. In such cases the benefit of any savings in the quantities of materials actually used up under each item of work during execution will accrue to the department.

(b) The overall percentage rate accepted and specified in the agreement shall not be varied on any account.

(c) The Contractor who quote very low rates will remit performance guarantee with a view to curb the tendency to quote low rates and execute the works unsatisfactorily.

(i) If the quoted rates for a work is below 50%, of the estimate rate it will be rejected.

(ii) If the quoted rates is between 25% and 50% below estimate rate, the contractor will remit performance guarantee equal to difference between estimate PAC and quoted PAC. This will be released after completion of the work.

4. In case it is not possible to open the tenders on the specified date due to any valid reason the revised time and date of opening of tenders will be intimated to the tenderers. Each tender should be accompanied by a receipt for an **Earnest Money Deposit of Rs.6000/-** The Earnest money deposit should be remitted to NCESS bank account.

**Tenders not accompanied by EMD, will be rejected.**

5. Contractors will be required to produce Income-tax returns, Pan and GST number

6. Each tenderer must also send a certificate of Income-tax verification from the appropriate Income-tax authority in the form prescribed therefore. In the case of proprietary or partnership firm, it will be necessary to produce the certificate aforementioned for the proprietor or proprietors and for each of the partners as the case may be.

All tenders received without a certificate as aforementioned will be summarily rejected.

8. The tenderer shall examine closely the CPWD Standard Specifications and also the standard preliminary specification contained therein, excluding the clause relating to arbitration contained thereof.

He shall also carefully study the drawings and additional specifications and all the documents which form part of tender.

8. a. NCESS does not undertake to construct or make available any approach road or other means of approach to the proposed work site and the tenderer shall get acquainted with the available means of approaches to the proposed site and quote for the various items. NCESS shall not be liable for any claim raised later on the plea of non-availability or non-access to the site.

10 (A) the contractor will examine the site condition and satisfy themselves of the availability of materials at hereby places, difficulties which may arise during execution etc before submitting tenders for the work.

11 The tenderer's particular attention is drawn to the sections and clauses in the general conditions.

### **General Conditions of Contract CPWD**

- (1) Test, Inspection and rejection of defective materials of work.
- (2) Carriage
- (3) Construction plant
- (4) Water and Lighting
- (5) Cleaning up during progress and for delivery.
- (6) Accidents
- (7) Delays
- (8) Particulars of payment.

The contractor should closely peruse all the specification clauses which govern the rates which he is tendering.

12. In consideration of the tender being allowed to quote for the work, he should keep the tender firm for a period of two months from the date of opening the tender during which period or till the tenders are decided whichever is earlier, he will not be free to withdraw the tender. Any such withdrawal will entail forfeiture of the earnest money deposited for the work.

Due to departmental or administrative reasons it is found necessary to keep the tender open for a further period, prior consent of the lowest two bidders shall be obtained in writing for further period of one month or more as required. In case lowest or any bidder refuses to extend the firm period that tender cannot be considered.

13 Execution of agreement for works shall be made within the time limit prescribed as follows.

(i) Time allowed for executing agreement without fine will be 14 days from the date of registration of the communication (selection notice) in the post office.

(ii) Further time of 10 days shall be allowed to execute agreement by realizing a fine of 1% of the PAC subject to a minimum of Rs.1000/- and maximum of Rs.25,000/-

(iii) In case of failure to execute the agreement within the above period (24 d/24 days), the offer of contract shall be cancelled, forfeiting the EMD and taking such other actions as mentioned in the bidding document. After canceling, the offer of contract, the tendering authority will negotiate with the next lowest bidder and award the work to him if he expresses his willingness in writing to execute the work at the accepted rate of the defaulted bidder. Otherwise the work will be retendered.

(iv) The Contractor shall take over charge of the site within 10 days after execution of agreement and commenced the work. The Selected bidder shall produce **a security deposit equal to 5% of the contract amount**. He shall execute an agreement for the work in the NCESS. If as a result of such measure due to the default of the tenderer to pay the requisite deposit, sign contracts or take possession of the work any loss to NCESS results the same will be recovered from him as arrears of revenue, but should it be a saving to NCESS,

13(a) The conditions stated herein are binding upon the contractor and shall be construed as a preliminary agreement between the successful tenderer and NCESS pending execution or agreement specified in clause 13 supra.

13(b) **The tenderer should submit along with this tender an agreement executed and signed in Kerala stamp paper worth Rs. 200/- (Rupees Two hundred only). A specimen form of the agreement is given as annexure to this tender. Tenders without the agreement in stamped paper will be summarily rejected.**

14 The acceptance of the tender vests with the NCESS who does not undertake to accept the lowest or any particular tender.

14(a) Director NCESS has the right to reject any tender or all the tenders without assigning any reason thereof.

15. The right to carry out the work in conformity with or in a manner entirely different from the terms of this invitation that may be considered most suitable before or subsequent to the receipt of tenders due to exigencies of work, is reserved with the NCESS

16. Tenders not submitted in such printed forms or submitted incomplete in any respect whatever such as unattested errors and corrections in rates, quantities, units or amounts (figures not expressed in words), totals of contract not entered, etc., shall be liable to summary rejection.

17. The earnest money deposit of the unsuccessful tenderers will be refunded immediately after tabulating tenders, keeping only the earnest money of the first 3 lowest tenderers.

19. Solicitors fee, if any, to be paid to the Law Officers/ Government for scrutinizing or drawing up of agreements will be paid and the same recovered from the successful tenderer.

20. Tenderers must also state in their tenders if they are prepared to carry out at their tendered rates such portion or portions of the work as may finally be allotted to them by the officer deciding tenders.

Note: - NCESS reserves the right to allot such portion of the work included in the tender at the rates quoted by the tenderer in the absence of specific noting by the tenderer. Such allotment shall not vitiate the acceptance and the tenderer shall indemnify NCESS against any loss to NCESS, due to failure on the part of the tenderer to carry out such portion of the work allotted to him at the rates quoted by him.

20(a) The quantities provided for in the schedule may vary and the contractor should be prepared to do excess only up to 25% over the schedule quantities at his quoted rate for the works and up to 1% of the contract price. For excess beyond this limit and for the extra items the agreement authority shall fix the rate by negotiation with the contractor for works within their power.

21. Any further information necessary can be obtained at the office of the undersigned on all working days during office hours.

**22 The work should be completed in all respects within two weeks from the date of execution of agreement.**

23. Payment by final measurement at unit prices.

(a) When payments on earth work exceeding 300 m<sup>3</sup> are made based on tape measurements the contractor shall give a declaration in writing to the effect that he agrees for the recovery of the over payments if any from the next bill .

(b) It shall be accepted as a condition of the contract that the payment of the final bill to the contractor less the withheld amount and his acceptance thereof shall constitute a full and absolute release of NCESS from all further claims by the contractor under the contract.

(c) Payment for additions and deductions for omissions. No authorized variation shall vitiate the contract but additions and omissions shall be measured and dealt with in accordance with clause 23(b).

(d) Items of work not expressly or impliedly described in the schedule, plans or specifications will be treated as 'extras". They will include only items of works which though highly necessary for the proper execution of the work and for its completion, were not provided for in the original contract.

1. The execution of an extra item of work and payment therefore will be based on the following conditions:-

(i) There shall be an order in writing to execute the extra item of work duly signed by Director, NCESS before its commencement.

(ii) If the contractor finds, after examining the specifications and plans that extras are involved, he should give notice to NCESS to this effect and shall proceed with the execution of the extra item, only after receiving instructions in writing from Director, NCESS

2. Extra items may be classified as additional, substituted or altered items, depending on their relation or otherwise to the original item or items of work.

3. The rates for extra items shall be worked out as below.

(i) In the case of all extra item whether additional, altered or substituted, for which similar items exists in the contract, the rates shall be derived from the original item by appropriate adjustment of cost of affected components. The percentage excess or deduction of the contract rate for the original item with reference to the departmental estimated rate shall be applied in deriving the rates for such items.

(ii) In the case extra items, whether altered or substituted, for which similar items exists in the contract, the rate shall be derived from the original item by appropriate adjustment of cost of affected components. The percentage excess or deduction of the contract rate for the original item with reference to the departmental estimated rate shall be applied in deriving the rate for such items.

(iii) In the case extra items, whether altered or substituted and for which similar items do not exist in the contract and rates exist in the schedule of rates, the rate shall be arrived at on the basis of the departmental data rate current at the time of ordering the extra item, after applying the tender deduction except on cost of departmental material. Tender excess, if any, will not be applied.

(iv) In the case of additional items, the rates shall be arrived at on the basis of the departmental data rates current at the time of ordering the extra item or the date of commencement of the extra item, whichever is earlier, after applying the tender deduction except on the cost of departmental material tender excess, if any, will not be applied.

(v) In the case of extra items, whether additional altered or substituted, for which the rates cannot be derived from similar items in the contract, and only partly from the departmental schedule of rates, the rates for such part or parts of items as are not covered in the schedule of rates shall be determined on the basis of the prevailing market rates giving due consideration to the analysis of the rate furnished by the contractor with supporting documents, including contractor's profit. This shall be added on to the departmental rate (including contractor's profit) current at the time of ordering or executing the extra item, whichever is earlier for the other part of the item for which rates can be derived from the schedule of rates.

(vi) In the case of extra item whether additional, altered or substituted, for which the rates cannot be derived either from similar item of work in the contract or from the departmental schedule of rates, the contractor shall within 14 days of the receipt of the order to carry out the said extra item of work, communicate to Director, NCESS the rate which he proposes to claim for the item, supported by analysis of the rate claimed and the department shall within one month thereafter, determine the rate on the basis of the market rate giving due consideration to the rate claimed by the contractor.

(vii) In the case of percentage rate contract, the rate for extra item shall be arrived at by applying the percentage excess or deduction to the departmental data rate as per the original schedule on which the tenders are invited.

24. In cases in which the contractor has executed extra items not contemplated in the agreement NCESS shall in promptly record all authorized extra items executed by the contractor. On receipt of the bill with the above statement and certificate, NCESS may make payment.

25. Arbitration shall not be a means of settlement of disputes of claims arising out of the contract relating to this work. All disputes and differences arising out of the Contracts that may be executed, in pursuance of the contract shall be settled only by the Civil Court in whose jurisdiction the work covered by the contract is situated for in whose jurisdiction the contract was entered into/in case the work extends to the Jurisdiction of more than one Court.

26. The Contractor shall not without the previous sanction in writing of the authority accepting the tender, execute any power of attorney in respect of any matter, touching this contract, and any such power of attorney executed without such sanction shall not be recognized by or be binding upon NCESS. It shall be entirely within the discretion of the authority accepting the tender either to grant such sanction or to refuse it or to revoke a sanction once given.

27. No part of the contract shall be sublet without written permission of the Director nor shall transfer be made by power of attorney authorizing other to receive payment on the contractor's behalf.

28. The Director or other sanctioning authority reserves the right to reject any tender or all the tenders without assigning any reason therefore.

28(i) Innovative case Cement & testing quality of the materials at their cost.

28(ii) The quality of materials used by the contractor should be ensured by the NCESS officers and testing of the materials wherever necessary will be done by the contractor at his cost.

In case of M.S. rods, the maximum wastage up to 5% in each of the different size of the steel rods used in the work may be allowed at the discretion of NCESS and the recovery will be made at the rates specified above.

30. The contractor's quoted rates shall be inclusive of seigniorage, ground rent, etc., that may be payable to the owner of private quarries.

32 The NCESS does not undertake to issue power roller for any work. The contractor will arrange the roller from Public Works Department or other Department and pay the hire charges demanded by them.

34. Tenderers should declare that they are not related to any employee of the NCESS who is in charge of or having control of the work. Relationship in this will be restricted to their, mother, son, daughter, brother, sister, direct uncle, nephew, father-in-law, brother-in-law, mother-in-law, sister-in-law and first cousin of the officer concerned. If the above condition is found to have been contravened, when they tender the earnest money/security deposit of the tenderer/tender will be forfeited and the contract entered into will stand cancelled.

34(a) The term NCESS employee will include persons working under the NCESS on deputation/ contract/ provisional basis for the purpose of this clause.

35. The contractor will provide his own tools and plant store sheds to store his own materials as well as those supplied by the department and will be entirely responsible for the proper use and safe custody of the latter and also for any loss, damage, and theft, mishandling weathering or any cause whatsoever.

35 (A) The responsibility for safe custody of materials at worksite and during transit will be vested with the contractor. The concerned overseer is in charge of the work will verify the stock and initiate action if shortage in stock is noticed. Other inspecting officers will also verify the stock during inspection.

36. In case of schedule rate contract, if different rates are quoted for the same specification of work under identical working condition at the same site/in different appendices of the schedule the lowest quoted rate will be accepted for the items in all the appendices.

37. The contractor shall be responsible for the safety of the labour employed by him and he shall be liable to pay the necessary compensation in case of accidents, as per the Workmen's Compensation Act.

38. The contractor will also be liable to abide by the fair wage clause condition.

39. The contractor shall be liable for all damages caused to public amenities such as Electric wires, Telephone cables, water mains and private property which should be repaired and restored with least delay.

42. The contractor shall make his own arrangements to extricate himself from any legal action instructed against him by other agencies.

43. Time is the essence of the contract. The contractor shall submit the chronological programme for execution of each stage of work before executing agreement, which shall be examined by the agreement authority and approve programme form part of the agreement. Undue and avoidable delay in the execution of the work will render the contractor liable to penalty.

44. The Director reserves the right to terminate the contract at risk and cost of the contractor at any time in case of bad work, slow progress or violation of rules in other ways

44(a) An amount equal to 30% of the cost of the remaining works at agreed rates of the terminated contract shall be recovered from the defaulted contractor towards the risk & cost. The contractor shall be directed to remit the risk and cost amount within 3 months. There is no need to wait till the work is alternatively through another contractor and the loss sustainable due to the default of the original contractor is assessed. Such loss, its any, shall be realized after completion of the work. If he fails to remit the amount within this periods following steps can be adopted for realization of loss. The amount can be realized from the following.

(i) EMD/Security

(ii) Bill amount/rates to on if any due to the contract.

(iii) Any dues from department to the contract.

(iv) Bank guarantee/Performance guarantee or by filing civil suits against the contractor

45. Director reserves the right to abandon the work at any stage if he finds such a course necessary and the contractor will be paid only for the finished items of works.

46. The contractor shall employ an engineering personnel, as detailed below. Cost of work executed: For works costing Rs.10lakhs up to Rs. 20lakhs

No. of personnel to be employed: One Engineering Diploma Holder

47. Tenders which are not in conformity with this tender notice are liable to rejection.

48. This tender notice with the conditions stated herein will form part of the contract documents.

49. In the case of schedule contracts when the rates quoted for particular item in figures and words disagree, the rates quoted in words will be taken for the purpose of the settlement of the contract. The contractor is bound to accept these rates if the contract is awarded to him. Similarly in the case of percentage rate contract when the overall percentage rates quoted in figures and words disagree, the rates noted in words will be taken for the purpose of the settlement of the contract. The contractor is bound to accept these rates if the contract is awarded to him.

50. The entries in the tender schedule issued by the NCESS in no way to be corrected by the tenderers and if the tenderers have to note anything, they should note the same as a foot note in the bottom of the page. If any correction is made by the tenderer in the tender schedule the tenders are likely to be rejected.

51. In the case of the percentage rate contract, the overall percentage rate quoted by the contractor shall not be varied on any account whatever and it shall hold good for all items done irrespective of variations in quantities.

52(a) If the failure of the contractor to complete the work on the stipulated date is due to any departmental delays or due to design and construction problems faced during execution, then the contractor may apply for execution of time to Director, NCESS before the expiry of the TOC. If no application is received from the contractor before the expiry of the time of completion as per agreement the contract will stand terminated on the expiry of time of completion stipulated in the agreement including extension already sanctioned. In case there is no default on the part of the contractor, the termination will not affect any penalty, when there is default on the part of the contractor. He shall be liable for penalties as per conditions of contract for termination. The contractor shall not execute any work as per the agreement after the expiry of the time of completion unless the agreement authority duly sanctioned extension of time. If the contractor carried out any work in contravention to this, the same shall be treated as unauthorized and no payment will be made for such work. NCESS will also have the right to claim from the contractor, cost of dismantling and removing such unauthorized works.

52(b). The extension of time of completion that can be granted at a time shall not exceed 25% of the original time or six months whichever is less. The maximum extension that can be granted for a work will be limited to half of the original time of completion.

52(c) The contractor is bound to complete the work within the stipulated period as per the agreement.

53 It shall be accepted as a condition of contract that the landed property or bank deposit based on which the solvency certificate was issued by the Revenue Department and produced during the time of registration will not be alienated during the period of contract without the permission of NCESS.

## **SPECIAL CONDITIONS**

**Name of work: Laboratory for Experimental Measurement of Settling Velocity of sediment particles**

1. All works shall be done in conformity with the specification and condition in the contract in force in the NCESS. The tenderer shall quote only single rate as an overall percentage above or below or at the rates given in the schedule by a single entry at the bottom of the schedule under the head "quoted rate of the contractor" by scoring out the irrelevant portion and attesting all the corrections. The rates quoted shall be inclusive once covering all the operation contemplated in the specification and tender schedule and all incidental work necessary for such operations such as shoring, bailing, form work, scaffolding and finally clearing away all rubbish, surplus materials, plants etc. the rates quoted shall be inclusive of all tax.
2. The rates quoted by the contractor for the various items shall be inclusive of all tools and plants required for the proper execution of work and all other incidental charges and separate claim for these will not be entertained under any circumstances.
3. The quantities shown in the schedule are only approximate and are subject to variations and the contractor is bound to do additional quantities of work if found necessary at his quoted rates up to 25% above estimate quantities.
4. All the rates quoted should be inclusive of GST.
5. All corrections and insertions in the original tender or schedule whether in the printed matter or elsewhere shall be attested by the tenderer.
6. The contractor has to quote for the specification and unit noted in the schedule. No correction of specification unit or quantity is admissible and if they make any correction in the specification, etc., the same will be rejected. If they have to note anything, they shall note the same as a foot note at the bottom of the page.
7. The earnest money deposit receipt should be attached to the tender, and details of EMD should be entered in the form, lest the tender will be rejected.
8. The contractor should produce the declaration in the form attached.
9. "The contractor is bound to carry out items of works which are not expressly or impliedly described in the tender schedule, plans, specifications and agreement but which are found necessary for the proper completion of the work during execution.
10. It will be responsibility of the contractor to obtain necessary land for stacking the materials for arranging the work.
11. Metal of the required sizes alone should be brought to the site of the work. Breaking boulders or rubble into metal will not be allowed either on or the side of the road. Metal should be stacked on one side of the road only and in such a way as not to cause any hazards to traffic, the stacks should be formed as per the standards profile current in the department.
12. Siliceous gravel shall consist of only hard nodules not more than 40mm nor less than 6mm. dia, in any direction, scraped from the hill sides and free from a mixture of earth and laterite chips.

13. Sand supplied should be clean, sharp and gritty to the touch, free from clay and other impurities and obtained from running water courses.
14. The contractor will have to make his own arrangements to convey the materials supplied by the department and for stacking, of materials and site shed, etc., which are found necessary for the proper execution of the work. He will also be responsible for the safe custody of the materials till they are used on works.
15. The payment of the earth work items will be made as per level measurements or tape measurements as per rules prevailing in the department. All items should be carried out as per relevant specification in the MDSS relevant IS code, National Building Code-2005 and Kerala Municipal Building Rules and clauses of preliminary specification should be complied with excluding clause 73 and other clauses relating to arbitration contained thereof.
25. The moulds, shuttering etc., required for the works should be made by the contractor and got approved by the NCESS officers at site before use.
26. Tribes of the locality should be employed to the extent possible. The contractor should pay fair wages to the labour engaged on the work which will be fixed by the government.
27. The contractor alone is responsible for the safety of his labourers and damages, if any payable under "Workmen's compensation Act" will be to his debit.
28. It shall be the contractor's responsibility to protect the public and his employees against accident from any cause during execution of the work and he shall indemnify the NCESS against any claims for injury to person or property resulting from any such accident, and he shall, were provisions of the "Workmen's Compensation Act" apply, take steps to properly insure against any claims there under. The contractor shall also help himself out of any difficulties of penalties arising from interference with private property in execution of the contract.
29. The contractor shall be liable for any loss caused to the NCESS on account of the above work including any that may arise due to no-fulfillment of the contract. He should comply with the rules laid down in the Central P.W.D. contract regulations regarding fair wages.
30. The work shall be completed in all respects and also at the rate of progress within the time limit and stipulations in the Notice inviting tender. Failing which the contractor is liable to be fined
31. Defects, if any noticed within 24 months (12 months in the cases of road works) from the date of completion of the work will be got rectified by the contractor, in default of which this will be attended by the department and the cost made good from the contractor.
32. All sums due to the NCESS under or by virtue of this contract shall be recoverable first from the security furnished by the contract and if the same is found insufficient, such deficit amount shall be recoverable under the provisions of the Revenue Recovery Act for the time being in force as though the same were arrears of Land Revenue or in any other manner as the NCESS may deem fit.
33. The contractor agrees that before final payment shall be made on the contract, he will sign and deliver to the Director, NCESS either in the measurement book or otherwise as demanded, a valid release and discharge from any and all claims and demands whatsoever for all matters arising out or connected with the contract. Provided that nothing in this clause shall discharge or release the contractor from his liabilities under the contract. The final measurements, if any, of NCESS shall be final, conclusive and binding on the contractor.
34. The tender notice and form of notice inviting tender shall form part of the Agreement.
35. All other conditions and specifications of contract are the same as those current in NCESS.
36. The method of measurements will be as per Indian standard 1200-1958.
37. All concrete should be machine mixed and vibrated.
38. If during execution, the proportion of usage of materials issued by NCESS alone is varied for which the price has been fixed in the tender, the quoted rate of the item will be allowed effecting short or excess or excess of departmental materials actually used as well as labour charges for handling the short or excess if any provided is in the same position.
39. The security amount will be released by Director, NCESS at his discretion after successful completion of the work taken over by NCESS retaining an amount as he may consider necessary to cover the liabilities, f any of the contractor. The maximum period of retaining the security deposit is 24 (twenty four) months from the date of completion of the work as certified by the agreement authority.

1. The security deposit of Contractors for work will be refunded after one year from the date of completion of works as certified by the agreement authority.
44. Conditional tenders will be summarily rejected and EMD forfeited. Also each tenderer shall furnish a certificate to the effect that no conditions are enclosed along with the tender.
45. The contractor is bound to keep a machine numbered well bound work spot order book. No oral orders said to have been given will be accepted as a claim for payment unless they are got recorded in the order book.
46. A hindrance register will be maintained in all site offices. The reason for the actual delay from time to time in completing the work will be assessed and recorded in the register by the site officers. The contractors should therefore satisfy themselves the correctness of recordings in the register and confirm the same by putting their signatures in the register at least once in a week. The entries containing the signature of the contractors will alone be considered for their claims.
- 48 Indian Standard Specifications shall be followed in case of all the materials used, workman ship and other condition and requirements of the contract.
49. The Contractor shall before commencement of the work submit a progress schedule indicating the date of start, monthly progress expected to be achieved and the anticipated completion date of each major item of work to be done by him. In case it is subsequently found necessary to alternate the schedule incorporating necessary modifications the same shall be got approved by competent authority.
50. Concrete made for a particular grade should yield the specified strength when tested; the tests should be carried out in accordance with the relevant Indian Standard specifications. The number of test specimens required and the frequency of sampling and the criteria for acceptance of the concrete as conforming to the specified grade shall be in accordance with the standard specifications and from the test results of compressive strength of line cubes: at 28 days after mixing. The contractor shall at his own cost, arrange for the moulding of the concrete cubes and testing of its compressive strength at 7days and 28 days.
51. Director, NCESS will have full powers to engage other workmen on the premises to execute fittings or carryout works not included in the contract and the contractor shall afford reasonable facility for the same.
- 52 No claim will be entertained by the NCESS on account of any increase in railway or road freight cost of all building materials and other materials like petrol, diesels, lubricants etc. and for any increase in the wages of labour increase in rates of sale tax etc. during the course of construction.
- 53 Any defects shrinkage or other faults which may appear within 24 months from the completion of the work shall be made good by the contractor at his own cost.
- 54 On completion of the work the contractor shall clear away and remove from the site all construction plant surplus materials debris and temporary works of every kind and leave the whole of the site and working clear conditions to the satisfaction of NCESS and in the event of the failure of the contractor to comply with those directions with in seven days after receipt by him of a notice to that effect from NCESS such clearness may be made by the NCESS at the expense of the contractor.
55. The work shall be executed only through licensed plumbers.
56. The cost of departmental connections for water supply and incidental charges if any shall first be borne by the selected contractor and he shall be paid the actuals based on vouchers produced by him. The account remittance in regard to Departmental connections for water supply and drainage shall be in the name of Director, National Centre for Earth Science Studies Akkulam Thiruvananthapuram.

## **FAIR WAGE**

- a. The contractor shall pay not less than fair wages to labourers engaged by him on the work: "Fair Wages" means wage whether for time piece work notified at the time of inviting tenders for the work and where such wages have not been so notified, the wage prescribed by the Central P.W.D. for the District in which the work is done.
- b. The contractors shall notwithstanding the provisions of any contract to the contrary cause to paid a fair wage to labourers indirectly engaged on the work including any labour engaged by his sub-contractor in connection with the said work as if the labourers had been immediately employed by him.

- c. In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement the contractor shall comply with or cause to be complied with the Central P.W.D. contractor's labour regulations made by Government in regard to payment of wages, wage period deductions from wages, recovery of wages not-paid and deduction unauthorisedly made maintenance of wages register, other terms of employment, inspection and submission of periodical returns and all wage cards, publication of scale of wages and returns and all other matters of a like nature.
- d. Director shall have the right to deduct from the moneys due to the contractor and any sum required of estimated to be required for making good the loss suffered by a worker or workers by reasons of nonfulfillment of the conditions of the contract for the benefit of the works, nonpayment of wages which are not justified by their terms of the contract or non-observance of the regulations.
- e. Vis-à-vis the central Government, the contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim from this sub contractors.
- f. The regulation aforesaid shall be deemed to be a part of this contract and breach thereof shall be a breach of this contract.
- (a) When excavations have been made or obstacles have been put in public through fares or in places where there is any likelihood of accidents, the contractor shall comply with any requirement of law on the subject, and shall provide suitable boarding, lighting and watchmen as necessary.
- (b) It shall be the contractor's sole responsibility to protect the public and his employees against accident from any cause and he shall indemnify Government against any claims for damages for injury to person or property, resulting from any such accidents and he shall, where the provisions of the Workmen's Compensation Act apply, take steps to property insure against any claims there under.
- (c) On the occurrence of an accident which results in the death of any of the workmen employed by the contractor or which is so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such accidents, intimate in writing to Director NCESS, the fact of such accident.
- (d) In the event of an accident in respect of which compensation needs to be paid, the contractor should pay the sum of money.

## **SPECIFICATION**

### **PART I GENERAL**

1. The rates tendered by a Contractor for the Work shall include the cost of.
  - (a) All labour and supervision thereof all materials, tools implements and plants of every description, ladders, cordage, Tackle etc. as well as the provision of safe and-substantial scaffolding required for the proper execution of the work in conformity with the specifications for the various items of work;
  - (b) Supplying the requisite agency with necessary equipment, to set out the work as well as to afford facilities for such examination of the work as NCESS may, at any time consider desirable, as also to count, weigh and assist in the measurement, or check measurement of the work or materials;
  - (c) Providing and maintaining all temporary fences, shelters, lights watchmen and danger signals and such other precautions as are necessary for the protection of the work or materials as well as to protect the public and those connected with the work from accidents at the site of, or on account of the work.
  - (d) All sheds, mortar mills and mixing platform of every kind required for the proper execution of the work according to the specification;
  - (e) All fees and royalties of materials and
  - (f) Finally clearing away of all rubbish, surplus materials plant etc. on completion of the work and dressing and leveling off and restoring the site to a tidy condition prior to handing over the work to NCESS its maintenance until so taken over.
2. In the case of supplies of materials such as rubble, broken stones grave], stand etc, which may have to be measured prior to being used on the work and the Contractor must always stack or arrange them neatly on level ground or on ground cleared and leveled by him for the purpose in such manner as may be ordered by the Engineer -in charge so that they may be easily susceptible of inspection and measurement, the cost of such cleaning leveling and stacking or arranging being included in the rates for work, Each stack must be straight and of uniform section throughout and of the dimension specified by NCESS. Materials not stacked or arranged in accordance with instructions issued will not be measured and paid for

3. The Contractor shall be bound to bear the expense of defense of any action or law proceedings that may be brought by persons for any injury sustained owing to neglect of above precautions in connection with the execution of the work, and to pay any damages and cost which may be awarded in consequence.
4. The Contractor shall also help himself out of any difficulties of penalties arising from Interference, with private property in execution of the contract.
5. Unless otherwise specifically provided for the contracts, the contractor shall at his own cost keep all portions of the work free from water whether due to spring, soakage, or inclement weather and in a neat and sanitary condition and shall also see that drainage and sewage are prevented from entering the site of work or accumulating therein.
- 6 The contractor shall be responsible for the proper use and bear the cost of protection of, materials made over to him by the NCESS for use on the work and bear any loss from deterioration or from faulty workmanship or any other cause. The cost of materials thus allowed to deteriorate amounting as it does to an excess issue over - sanctioned quantities, will be recovered at rate 20 percent over the actual cost. The orders of the Director/ Officer in Charge in the matter shall be final and binding on the Contractor
7. Any material brought to the site of-work, or any work done by the Contractor but rejected by the Officer-in-charge as being not up to the specifications shall in the case of materials supplied be then and there removed from or broken up at the site of work, and in the case of work done be dismantled or rectified at the expense of the contractor as' may be ordered by the officer -in-charge.
8. In all cases whether so specified in the contract or not, the work shall be executed in strict accordance with the contractor's accepted tender and these specifications and with such further drawings and specifications and orders as may from time to time be issued by
9. Whenever the contractor is ordered by Director/Officer In charge or his authorized assistant or subordinate to execute any item of work which is not in the tender, it shall be the Contractor's duty to get a special price arranged for the item and to see that it is written in the workspot order book (which shall be provided by the Officer in charger and kept in the work by the subordinate in charge) and that this order is initialed and dated by the contractor and the officer ordering that particular item of work. For any extra item executed by the contractor and not so entered in the work spot order book and initialed both by the contractor and the NCESS's officer ordering such extra item that contractor shall have no claim for extra payment.

**SPECIFICATIONS**

Part-II Material

Part-III work

Signature of Tenderer .....

Date:

**FORM OF DECLARATION**

1. I \_\_\_\_\_ do hereby declare that none of my relations as per the list given in Section 6 and Schedule 1A of the Companies Act, 1956 is in charge of the above work or are having control over it.

2. I \_\_\_\_\_ do hereby distinctly and expressly declares and acknowledge that I have read the specifications therein and the NIT and do hereby admit that those conditions are binding on me and I shall abide by the terms and conditions as stipulated therein in respect of work.....

..... I am enclosing preliminary agreement in stamp paper worth Rs.200/- ( Rs. Two hundred only)

3. I \_\_\_\_\_ do hereby certify that no conditions are enclosed with the tender.

Place **CONTRACTOR**

Date

Note. If the Contractor is found at any stage, to have suppressed any information required, his earnest money for the work is liable to be forfeited and contract entered into, will stand cancelled.

**FORM OF NOMINATION**

I \_\_\_\_\_ do hereby nominate and authorize Sri./Smt. \_\_\_\_\_

\_\_\_\_\_ aged \_\_\_\_\_ years of \_\_\_\_\_ village \_\_\_\_\_ Taluk \_\_\_\_\_ District residing at \_\_\_\_\_

\_\_\_\_\_ to receive all any sum found due to me under the terms of contract (Agreement No. \_\_\_\_\_

dated \_\_\_\_\_ and details of contract in the event of my death before the amount has become payable or having become payable but has not been paid.

Signature :

Name :

Address :

In the presence of witness:

1. Name & Address

Signature

2. Name & Address

Signature

**FORM OF TENDER**

**Name of work: Laboratory for Experimental Measurement of Settling Velocity of sediment particles**

To

Sir,

1. I/We do hereby tender to execute the works enumerated in the Schedule accompanying in accordance with the terms in your tender notification dated , .....and specifications and conditions of contract in force in NCESS
2. I/We further agree to complete the whole work in ..... weeks/months from the date of receipt of order to start work, and maintain the minimum rate of progress specified in the Tender Schedule
3. I/We do/do not agree to accept and carry out such portions of the work included in my/our tender as may be allotted to me/us if the work be not given to me / us -
4. I/We agree to keep the tender open for acceptance ..... days from the due date of submission there of and not make my modifications in its items and conditions which are not acceptable to NCESS
5. A sum of Rs ..... is hereby forwarded in as earnest money I/We fail to keep the tender open as aforesaid or make any modifications in the terms and conditions of the tender which are not acceptable to the National Centre for Earth Science Studies

OR

If after the tender accepted, I/We fail to execute the agreement as provided in clause 11 of Tender Notification or to commence the execution of the works as provided in the conditions. I/ We agree that NCESS shall, without prejudice to any other right of remedy, be at liberty to forfeit the said earnest money absolutely.

Yours faithfully,

(Usual Signature of Tenderer)

Full Name:

Nationality:

Place of Residence

Date of Submission.

Acc: 1. Tender Scheme... \_\_\_\_\_

2. Earnest money Rs \_\_\_\_\_

3. Signed copy of specification

4. Signed copy of plan

**AGREEMENT TO ACCOMPANY IN STAMP PAPER TO THE VALUE OF Rs. 200/-  
ALONG WITH THE BID**

Article of Agreement executed on this the .....  
..... Between National Centre For Earth Science Studies Acting  
(hereinafter referred to as "the NCESS") of the one part and.

Shri.....  
..... (name and address of the tenderer)

(Hereinafter referred to as "the bounden "of the other part.)

Whereas in response to the invitation for tenders, contained-in Notifications No .....  
dated ..... inviting tenders the bounden has submitted to  
NCESS a tender for the ..... specified therein subject to the terms and conditions contained in  
the said tender.

WHEREAS the bounden has also deposited with the NCESS a sum of Rs. ....  
(Rupees..... ; ..... )  
as earnest money for execution of an agreement under taking the due fulfillment of the contract in case  
his tender is accepted by NCESS.

NOW THESE PRESENTS WITNESS AND IT IS HEREBY MUTUALLY AGREED AS FOLLOWS.

1. In case the tender submitted by the bounden is accepted by NCESS and the contract is awarded to the bounden, the bounden shall within 10 days of acceptance of his tender execute an agreement with the NCESS incorporating all the terms and conditions under which NCESS accepts his tender.
2. In case the bounden fails to execute the agreement as aforesaid incorporating the terms and conditions governing the contract, NCESS shall have power and authority to recover from the bounden any loss or damages caused to the NCESS, by such breach as may be determined by the inadequate the deficit amount may be recovered from the bounden and his properties movable and immovable and also in the manner herein after contained
3. All sums found due to NCESS under by virtue of this agreement shall be recoverable from the bounden and his properties, movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land Revenue and also in such other manner as the NCESS may deem fit.

Signature Director

58. Tender document should be accompanied by the following schedule. In order to assess the experience of the tenderer, performance certificate from Government Departments, registered companies, for having executed similar works and its value should be furnished by the tenderer.

**SCHEDULE EXPERIENCE**

**Name of employer**

**Name location & type of contract**

**PAC of work & date of tender notice**

**Accepted PAC & percentage rate quoted**

**Time of completion as per original**

**Time taken completion**

**Was contract satisfactorily completed including**

**Work carried out by the contractor during the liability period of the project**

**Note: In order to assess the experience of the tenderer, performance certificate from Government Departments, registered companies, for having executed similar works and its value should be furnished by the tenderer.**

ITEM NO	SPECIFICATION	UNIT	QTY	RATE	AMOUNT
1	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	SQ.M	5	1.5	7.5
2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand	Cu.M	5	5582.8	27914
3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing : 1:1½:3 (1 cement : 1½ coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal	Cu.M	2	6990.4	13980.8
4	Providing and fixing aluminium work for doors, windows, ventilators and partitions, columns with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	110	354.5	38995
5	Providing and fixing 18 mm thick multi wood board of U Pvc Polyester resin for panelling fixed in Aluminium Doors, windows, shutters & Partition frames with C.P brass / stainless Steel screws etc complete as per architectural drawings of Engineer in Charge  Multi wood 18mm thick board	Sq.M	30	1956.9	58707

6	<p>Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.</p> <p>Note :The all steel structural members and fixtures like base plate, anchoring bolt, non shrink grout etc should be approved by Engineer in charge</p>	Kg	140	90.25	12635
7	<p>Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness</p>	Sq.m	15	741.5	11122.5
8	<p>Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.</p>	Sq.M	17	550.4	9356.8
9	<p>Providing and laying mat finished vitrified tile of size 300 X 300X 9.8mm having with water absorption less than 0.5% &amp; conforming to IS 15622 of approved make in all colours &amp; shade etc laid on 20 mm thick base C. M 1:4 ( 1 cement 4 coarse sand) in all slopes and patterns including grouting the joints with white cement mixed with matching pigments etc complete as per direction of Engineer in charge</p>	Sq.M	10	764	7640
10	<p>15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix : 1:4 (1 cement: 4 fine sand)</p>	Sq.M	15	241.5	3622.5
11	<p>Providing and fixing wash basin with rackbolts, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings , cutting and making good the walls wherever require: White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap</p>	E	1	2020.6	2020.6

12	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :  Water thinnable cement primer	SQ.M	40	36.95	1478
13	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications : Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of Special primer applied @ 0.75 ltr /10 sqm	Sq.M	40	98.95	3958
14	Supply and fixing of 0.5HP self priming water pump including all labour, material and conveyance charges etc	E	1	3900	3900
15	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall 20 mm nominal outer dia Pipes 15 mm nominal outer dia Pipes	RM RM	15 15	142.95 179.95	2144.25 2699.25
16	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI : 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support i/c fittings & fixtures for tank shall be paid separately. 500 litre Tank	Ltr	500	7.25	3625
17	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. 15mm nominal bore	E	1	475.7	475.7
18	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour. 450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms	E	1	390.2	390.2
19	providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular Shape 453X 352	E	1	752.8	752.8

20	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	E	1	112.3	112.3
21	Providing and fixing C.P. brass angle valve for basin, mixer and geyser points of approved quality conforming to IS:8931 15mm nominal bore	E	2	475.7	951.4
22	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.	Sq.M	16	993.15	15890.4
23	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	E	1	414.45	414.45
24	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge	E	1	795.15	795.15

25	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	E	1	414.5	414.5
26	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete	E	1	359	359
27	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge	E	2	68.3	136.6
	Total Addcost Index 44.12% of Rs157048/- ( 224499-67451  Grand Total Say Rs 293800/- Rupess Two Lakhs Ninty Three Thousand Eight Hundred Only				224498.7 69289.58 293788.28

**Laboratory for Experimental Measurement of Settling Velocity of sediment particles**

1. Last date of tender: 26.04.2019, 12pm
2. Tender opening: 26.04.2019, 3pm
3. EMD: Rs.6000/-
4. Tenders without the agreement in stamped paper will be summarily rejected.
5. I / we hereby agree to execute the work

.....@ estimate rate

..... % below estimate rate

..... % above estimate rate

Signature

Name and address